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Nursing Documentation

By

© Patricia M. Paone

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfilment of the requirements for the degree of Master of Nursing.

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The undersigned certify that they have read, and recommended to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled NURSING DOCUMENTATION submitted by PATRICIA M. PAONE in partial fulfilment of the requirements for the degree of MASTER OF NURSING.

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Abstract

Documentation of nursing care is thought to be a fundamental means of communication amongst nurses. As health care in Alberta undergoes a radical redesign, hospital nurses will have to extend their communication network into the community. A first step in the process of developing an effective communication link is to categorize and describe what hospital nurses have recorded on nurses' notes about the care they have provided the patient.

The sample consisted of all nurses' notes of patients admitted to one acute care pulmonary ward over a five day period with a diagnosis of chronic obstructive pulmonary disease or pneumonia. The data collection tool was developed from the charting guidelines currently in place in the institution. The study was divided into two parts: 1) the required elements of charting, and 2) content analysis of the nurses' notes. It was found that the nurses had great difficulty in adhering to the charting guidelines.

Content analysis revealed that the focus of the nurses' notes was to record the activities of the patients while little or no evidence of planning or evaluation of nursing care was found. Nurses performed detailed body systems reviews at the beginning of their shifts but did not use the findings as the basis of planning care. Nurses frequently substituted colloquial terminology for standard medical terminology. Finally, nurses used three

methods of recording their care. The least informative method of documentation was found to be block charting which was often done at the end of a twelve hour shift.

It was apparent from this review that the nurses' notes on the selected charts were not the primary means of communication. The documentation forms did not enhance the nurses' ability to capture and synthesize pertinent data. Nurses are making increasingly complex decisions that effect patient care. The future direction of nursing documentation will need to reflect the nursing judgements, the interventions and the evaluation that surround these decisions. Future studies should focus on identifying the specific barriers which prevent effective documentation such as increasing visual cues on documentation forms, moving the point of data capture closer to the patient, and identifying ways in which nurses will come to value their documentation.

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In memory of my mother, Mary Margaret, who encouraged all of her children to seek after their dreams. A special thanks is extended to my Committee members who helped me make this dream come true.

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CHAPTER I: INTRODUCTION

This much is known, nurses document. Florence Nightingale mused that to record nursing observations was more often led to a weakening of the memory and the ability to observe (1860/1969). However, Nightingale did express her opinion that the good results of nursing would be lost if nurses did not how to manage their patients when they were not present. From this statement one may see the first documented articulation of the need to have an established means of communication amongst nurses. Today, the act of documentation occurs when, in the nurse's professional opinion, a record of observations and events is required (Fischbach, 1991). The patient record provides a centralized means by which the nurse can facilitate, coordinate, evaluate and communicate patient care (Creighton, 1987, a, b; Feutz-Harter, 1989). Documentation can be of any type as long as it is comprehensive, factual and of clinical significance (Fiesta, 1991). As the scope of nursing practice expands, the requirement for documentation will become more rigorous (Deane, McElroy & Alden, 1986). The focus of nursing documentation will continue to be on increased communication through the recording of nursing judgements, interventions and evaluation of care which demonstrate the impact of care on patient outcomes (Creighton, 1987, a, b).

The professional nurse makes complex decisions concerning patient care and nursing documentation should reflect this decision-making ability. It must be noted, however, that the process of documenting nursing care is a learned skill which should undergo refinement as the nurse becomes more proficient at nursing (Feutz-Harter, 1989).

Several recent trends have influenced the ways in which nurses document. Firstly, the change in the provincial funding formula has radically changed how nurses provide care. Such changes have lead to a decreased length-of-stay for patients and a concomitant increase in nursing intensity. Nurses no longer have time for exhaustive data collection, problem identification and implementation routines but must set priorities of care based on shortened hospitalization and the increased need for community involvement in the convalescent phase. There is a greater immediacy of care with charting becoming a briefer and more cost effective tool for communication (Comstock & Moff, 1991; Donnelly, Yarbrough & Jaffe, 1989; Murphy, Beglinger & Johnson, 1988; Warne & McWeeny, 1989). However, Tapp (1990) suggests that there is a current inability of nurses to integrate documentation into the nursing process as the procedure is not seen on the same plane of responsibility as direct patient care. For such nurses the process of documentation is relegated to a "when time is available" scenario.

Secondly, with the introduction of the concept of quality improvement there is a trend for hospital administration to examine not only the process of care given but also to focus on clinical performance outcomes (Iyer & Hand Camp, 1991). Nurses have done well in the past to document the process of patient care but have placed little emphasis on the evaluation of such care. Such a paradigm shift results in a radical rethinking of the type of information the nurse must document.

Thirdly, to enhance the ease with which the patient is returned to the community nurses need to develop better ways in which to communicate vital nursing information to community agencies. Currently, emphasis on documentation has been institution specific without evidence of sharing information amongst various sectors of the health care system. Nursing documentation is recognized as an acceptable means by which nurses can communicate with each other and with other health care personnel.

Fourthly, the general public has become more aware of health issues and options for care. This increased consumer awareness has lead to the demand for nurses to provide knowledgeable and competent care which may transcend the boundaries of one agency. Professional nurses will be required to interact with various agencies to formulate a plan for continuous care. Evidence of such knowledge and planning should be found in the nursing

documentation. The information required on the interagency forms frequently is obtained from the content of nursing notes.

Lastly, all nurses in acute care hospitals document information as a matter of fulfilment of their legal and professional responsibilities. It can be said that the legal requirements deal in the "shoulds" of documentation rather than on an exclusive list of items that can be said to constitute nursing documentation. Legal requirements are in part fulfilled when the nurse records evidence of care and the response of the patient to such care (Iyer & Hand Camp, 1991). Fischbach (1991) uses the premise of individual, professional accountability as a basis for establishing documentation principles and standards used to develop hospital documentation policies and procedures.

Assumptions

This study is based on the assumptions, firstly, that nurses in acute care hospitals document information about the care they have given as a matter of fulfilment of their legal and professional responsibilities. Secondly, that documentation is carried out in accordance with hospital policies and procedures. Thirdly, that nursing documentation is an acceptable means by which nurses communicate with each other as well as with other health care personnel. Fourthly, that such documentation is viewed from a nursing

perspective with a focus on the response to care given. Fifthly, that such documentation is amenable to study (Brink & Wood, 1989).

Reliability

To establish the reliability of the content analysis the procedure of intrarater reliability testing was utilized. In this procedure the researcher rated particular individual nursing episodes on more than one occasion. Intrarater reliability was considered to be high if the separate ratings produced the same response categories. Use of the technique was undertaken by rereading and recording a random selection of nurses' notes. Three charts were randomly selected for review. Three nurses' notes from each randomly selected chart were chosen (i.e., nine nurses' notes represented nine distinct episodes). The researcher used new Documentation Information Collection Sheets (see Appendix A) sections rated each nurses' note for the presence or absence of all the required charting elements. The two sets of codings were compared fro similarities and differences. The charting guidelines were reviewed and the correct coding was chosen. There were no discrepancies that required any discussion with a committee member. To prevent researcher bias, both the charts and the nurses' notes were randomly selected by another person.

Face Validity

According to Field and Morse (1985) in qualitative research, validity was dependent upon the mesh of the findings of the researcher and reality. Face validity represented the lowest degree of substantiation of reality in this study (Brink & Wood, 1988). The reality in this study was derived from the researcher's subjective belief that what the nurses wrote down in the nurses' notes was true and that the content analysis was based solely on the information from the chart. Since there was no research dealing with the content of nurses' notes involving the care of patients with pulmonary conditions the researcher was unable to establish any higher degree of validity (Brink & Wood, 1988).

Ethical Considerations

This study involved content analysis of nurses' notes in charts obtained from the medical records department of one teaching hospital. There was no patient, medical or nursing contact involved during the study. There was no patient, medical or nursing staff identified in the final report. In such circumstances the necessary consent for chart review was obtained from the hospital as the source of the data was owned by the institution who held the information in trust for the patient. There were no identified risks involved in the study.

Confidentiality of information was maintained by placing the patient identification information (i.e., last name, first name and hospital identification number) and research chart number in a separate master file. All patient identification was removed from the chart prior to copying of the pages. The signature of each nurse was obliterated. Further, the researcher restricted discussion of the content analysis to committee members only. Once the research is complete the working copies of the patient chart will be shredded prior to disposal. The original copy of the chart and data collection instruments will be stored for seven years and will be shredded prior to disposal.

Statement of Purpose

This study was a retrospective review of required charting as per policies and procedures of a large urban teaching hospital and the content analysis of selected elements in the nurses' notes. Since documentation was considered an important means of communication it was important to know what nurses thought was significant to write down. The purpose of this study, then, was to categorize and to describe what nurses had written on hospital charts about the care they had given.

CHAPTER II: LITERATURE REVIEW

Since nurses have spent up to 60% of their working time with documentation (Deane, McElroy & Alden, 1986) it was important to know what nurses documented. A search of the literature revealed that reference to the actual content of nurses' notes was found only as specific examples in articles discussing the legalities of charting These examples referred to actual court cases and were used to illustrate the incomplete or confusing nature of the information recorded. Traditionally, authors approached documentation issues from three distinct aspects: 1) discussions concerning the legal requirements of documentation, 2) anecdotal reports on documentation changes in a particular institution, and, 3) research involving an aspect of charting. This review followed such an approach.

Legal Requirements

Although all the literature surveyed were based on the current American legal system it must be acknowledged that such a system was built on English common law. Since Canadian law shared the same historical foundation the general concepts presented were similar enough to be of value to Canadian nurses. Legal requirements for documentation were discussed in general terms with examples of actual litigation as a reinforcement of the

concept (Bailey-Allen, 1986; Creighton, 1987 a, b; Feutz-Harter, 1989; Hershey, 1976; Murphy, 1987; Rhodes, 1986; Schaefer, 1981). In the broadest sense, legal requirements dealt with the "shoulds" of documentation rather than in the production of exhaustive lists of items identified as constituting nursing documentation. Only one author (Thomas Eggland, 1988) expressed the opinion that these shoulds remained constant regardless of the method of documentation chosen. Within this broad framework three perspectives were identified as providing the foundation from which the arguments about the shoulds of documentation originated. The three perspectives were: 1) an increased responsibility for nursing judgments and, therefore, an increased personal responsibility for documentation; 2) a business record of the hospital used for legal (but not necessarily for litigation purposes) and financial purposes; and, 3) a defense against litigation.

Schulmeister (1987) concluded that although each State had a nursing practice act individual institutions were responsible to objectively set forth the expected standards of care. Nurses were required to meet or to exceed such standards of practice and could be held personally liable if they did not meet the standard. According to Schulmeister it was the growing autonomy of the nursing profession that caused the shift from global protection by the institution to that of having to defend oneself apart from

the institution. As an example to explain the growth in autonomy of professional nurses, Creighton (1987, a) and Bergerson (1988) used the paradigm shift from the charting of conclusions to the charting of facts. Both authors used the illustration of a conclusion-type statement such as "appears to be" to demonstrate that the historical approach to nursing documentation of thirty to forty years ago would not be acceptable in today's court of law. Such an approach has been replaced by the necessity to have recorded objective data obtained by direct observation (Bergerson, Creighton). On the other hand, Kerr (1975) indicated that there was one legitimate time in which nurses could use the word appears. Kerr stated that it was not possible for a nurse to determine whether a patient was truly asleep unless the nurse woke the patient. Therefore, in this instance, the appropriate charting would not have been an observation but a conclusion. Historically, this argument may have been a legitimate one, however, in today's milieu where a nurse may be required to diagnose a cardiac arrest, the same objective, observational process could be used to record that a patient was sleeping.

In the second perspective three authors referred to the patient chart as a business record. Chaney (1986) asserted that the primary purpose of the chart was to serve the objectives of the business operations and not to provide a legal document to be used in court. From Chaney's perspective the content

and frequency of documentation was based solely on business policies and procedures. Chaney concluded that if the business polices and procedures were clinically sound and were used to guide the documentation, the nurse did not benefit by charting defensively. For example, if the hospital had a policy on summary charting of repetitive nursing care, the nurse would not be liable for not charting each time that a particular nursing action was carried out. Creighton (1987, a) agreed with Chaney that the chart represented the business word of the hospital. However, from the example used by Creighton it was unclear whether the author also accepted summary charting. Feutz-Harter (1989) focused exclusively on the cost recovery aspect of the chart as a business record. Failure to adequately document the justification of the patient's hospitalization was cited as the most frequent reason hospitals were not reimbursed for the care given. Although cost recovery is not yet a component in the Canadian health care system, the concept of care maps derived from best practice scenarios is beginning to appear in hospitals. Documentation of the nursing care and the patient's response to the nursing care could become one method to measure the cost effectiveness of the resources used to carry out a care map.

The last perspective, defensive charting, was used most frequently when authors discussed examples of the shoulds of charting. Drawing on cases of

nurses who had experienced litigation, Iyer and Hand Camp (1991) developed extensive guidelines for charting techniques which, in their opinion, contributed to a practical defense against malpractice suits. Each possible pitfall was identified and concrete examples to prevent such occurrences were given. Fischbach (1991), on the other hand, used the premise of individual, professional accountability as the basis for establishing documentation principles and standards. The subsequent guidelines provided the nurse with suggestions or cues to consider what was legally relevant data. Guidelines developed from such principles and standards provided the nurse with a legitimate defense. The authors (Iyer & Hand Camp, 1991) made the assumption that with practice, nurses would automatically incorporate the guidelines into the charting process. No suggestions, other than fear of litigation, were given as motivators to encourage nurses to chart appropriately. For Fischbach the process of documentation was an intrinsic component of nursing practice.

Fischbach (1991) pointed out that even though the charting was exemplary, if the care given was below established standards such documentation may not prevent a malpractice suit. On the other hand, Murphy (1987) cited cases where the defendants showed that nursing care superseded the requirement to document nursing care. For instance, some

nurses used a formal worksheet on which routine care was recorded but not kept as part of the chart. In such cases the standard practice was to record routine care on temporary sheets but document only significant information in the chart. Fiesta (1991) supported Murphy by stating that the philosophy of "not charted is not done" placed an unrealistic burden on nursing practice. Hershey indicated that accurate and concise nursing documentation contributed to exemplary patient care and that in some instances even decreased the likelihood of nursing error. Creighton (1987, b) pointed out, however, that if a nurse made an error in the charting procedure (i.e., completely obliterated an entry) it could not automatically be assumed that the nurse had done so for fraudulent reasons.

Rather than presenting guidelines for the shoulds of documentation, several authors produced specific inventories of "do's" and "don'ts". These inventories were clustered around required charting elements such as the legibility of handwriting (Bergerson, 1988; Feutz-Harter, 1989; Schaefer, 1981) and required content elements such as the charting of patient behaviour (Bergerson, 1988; Kerr, 1988; Thomas Eggland, 1988). Regardless of which view was taken (i.e., professional responsibility or charting defensively), the authors cited above, consistently showed that nurses were found at fault because of their inadequate or inaccurate documentation.

The second major thrust of defensive documentation was that it should act as an accurate, concise, objective means of communication (Bailey-Allen, 1986; Bergerson, 1988; Creighton, 1987, b; Feutz-Harter,1987; Fiesta, 1991; & Kerr, 1975; Murphy, 1987). Bailey-Allen cautioned that charting generalizations was one of the most potentially damaging legal problems a nurse would have to overcome. Kerr expressed the opinion that the focus of charting should be on the comprehension of what was written and not whether a nurse wrote in complete sentences. Fiesta, Feutz-Harter and Bergerson all focused on a particular technique, which, if used, enhanced the accuracy and conciseness of documentation. For instance, Fiesta demonstrated that charting by exception, when fully supported by written institutional policies and procedures, prevented the nurse from being caught in the "not charted not done" dilemma. Feutz-Harter on the other hand, reported that the technique of flow charting met the requirements of documented objective observations. Feutz-Harter also recommended that the narrative note be used only when information could not be documented on the flow chart. Bergerson introduced a four step system that nurses used prior to committing any patient information to writing. In all the examples cited above, the implication was that increased objectiveness led to decreased successful litigation based on rambling or inaccurate documentation.

To overcome the possibility of inaccurate or biased documentation Groah and Reed (1983) suggested that nurses should incorporate charting processes that included the use of the nursing diagnosis (ie., problem oriented medical record). The authors accepted, without question, the legitimacy of the nursing diagnosis to form the basis for an objective-type nursing documentation. Fortin and Rabinow (1979), on the other hand, reviewed state laws and determined that the use of nursing diagnosis was not supported at that level. Fortin and Rabinow, however, made the case that the nurse was bound by a common-law duty to the patient, rather than by any legal compulsion, to have made nursing diagnoses throughout their care of the patient. Groah and Reed suggested that if the nurse was uncertain as to the objectivity of any findings then, as a responsible practitioner, the nurse would have another practitioner verify the observations. In this way the authors (Groah & Reed, 1983) implied that the objectivity of the documentation increased and the documentation of inferences decreased. However, Kerr (1975) gave a clear example of where a third party negatively influenced the way in which nurses observed and documented their direct observations of the patient. Had the nurses continued to document and communicate their unbiased observations the patient may not have experienced an untoward event.

Feutz-Harter (1989) argued that even though nurses communicated in many ways with other healthcare personnel the chart remained the penultimate communication tool and that the nurse was responsible for knowing all the information contained in the record. Feutz-Harter (1989) portrayed the nurse as the gatekeeper of the record. Although physicians had the responsibility to read nurses notes, nurses may have had the added responsibility to communicate orally when, in the nurse's judgement, the patient required immediate medical attention. It was frequently found that in such situations nurses failed to document the pertinent information conveyed to the doctor.

The authors (Chaney, 1986; Feutz-Harter, 1989) suggested that increased timeliness and accuracy of documentation could be obtained if the nurse kept short notes concerning any patient care given or information received. At the earliest opportunity the nurse would then transfer the notes to the permanent record. Chaney and Feutz-Harter concluded that such a practice increased the probability that all important information was documented. Bailey-Allen (1987) and Rhodes (1986) concurred with Feutz-Harter's notion that "crib" notes used throughout the shift would lead to more complete documentation. Rich (1983) proposed the use of a pocket recorder which could be replayed when the nurse finally charted. None of the authors

considered this method of double documentation to be an inefficient use of nursing time or that charting after the fact created other problems. For instance, the timing of the entry was a matter for debate. Bailey-Allen (1986, 1987) stated that since the time of the charting was not directly related to the care given the time of charting was of no importance. The nurse, therefore, was to chart the time of the nursing activity and not the time the entry was made. Creighton (1987, b) and Feutz-Harter (1989) gave the opposite opinion. To Creigthon and Feutz-Harter the time of the care and the time of the documentation of the care were of equal importance. Creighton also suggested that it was important to have included a reason for the delay in the documentation.

In summary, there were three perspectives that described the legal aspects of documentation; nursing autonomy, documentation as a form of business record and documentation as a defense mechanism. Documentation could be considered a legal yardstick by which the continuity of nursing care could be measured (Schaefer, 1981). Although most authors cited in the review dealt with the legal shoulds of documentation there were no absolutes concerning what was or was not important information to document.

Anecdotal Reports

The majority of the literature found was of an anecdotal nature and

most frequently centred around how a particular hospital solved the problem of charting. However, several themes emerged from this literature. There was a general sense that nursing had become an increasingly more complex profession and that the current charting methods, which focused mainly on the recording or listing of care provided, were inadequate to communicate this professionalism (Deane, McElroy, & Alden, 1986; Fox-Unger, Newell & Guibault, 1989; Smith, Lafoy, Macklin, & Minors, 1991). From a management perspective, the cost of current documentation methods were prohibitive and required revision in order to keep the cost of providing care within a given budget (Comstock & Moff, 1991; Warne & McWeeny, 1991; Murphy, Beglinger, & Johnson, 1988). Deane, McElroy and Alden (1986) traced the changes in documentation to parallel changes in the concept of professional nursing practice. Nursing care plans, introduced in the 1950s, were deemed to be easy-to-use communication tools defining action plans for patient care. The tool was a separate document and nurses frequently failed to chart on the patient problems and nursing actions identified. Such a tool was considered to be part of the documentation of the nursing process and was used as the basis for nursing interventions.

Nurses have created barriers for themselves by developing chart forms based on the medical model (Fox-Unger, Newell, & Guibault, 1989). The

importance of a thorough patient assessment as the cornerstone of the nursing process remained constant. The format of such an assessment, however, should be blended with the components of the nursing process rather than work against it. For example, Smith, Lafoy, Macklin, and Minors (1991) reported on the revision of a chart form to be used in the first 48 hours of postoperative care. The authors described that a consensus was achieved regarding the contents of comprehensive nursing documentation. However, following introduction of the new form, the authors described their inability to assess the successfulness of the form based on nursing care plans created for this population of patients. It was not apparent that the authors considered the nursing care plan in the conceptual phase of form design.

Costello and Young Summers (1990) argued that at the abstract level traditional documentation systems presented the nurses with a dichotomy. The nurse was to use a professional model to provide nursing care but the documentation of such care was to be carried out in a functional or task-oriented manner. Such a dichotomy promoted the use of intuitive nursing care actions rather than nursing care plans developed from objective problem oriented nursing assessments. At the concrete level, Gryfinski and Lampe (1990) identified several major problems with narrative charting (i.e., duplication of flow chart information, incomplete patient assessments etc.) as

the impetus to change a documentation format. The authors (Gryfinski, & Lampe) did not discuss the root cause, or reason for the duplication of charting. The question to be answered was whether the nurses would return to previous charting behaviours once the novelty of the new charting process disappears. For example, in the Gryfinski and Lampe illustration the information contained in the flow sheets was physically separated from the narrative sheets. Although the forms and concepts of charting differed the fact remained that the data was separated in precisely the same manner as that of the old charting method (i.e., assessment parameters were separate from the narrative note).

Several authors (Poss, 1991; Schmidt, Gathers, Stewart, Tyler, Hawkins & Denton, 1990; Slone, Burkholder & Campion, 1989) reported that a literature review or copies of chart forms obtained from other hospitals were inadequate for their particular institution needs. Poss (1991) and Slone et al (1989) cited the need to meet the new national operating room nursing standards as the driving force behind the revision of forms. Since the standards were relatively recent, both Poss and Sloan et al were most likely leading the way in developing forms that conformed to the new criteria. Schmidt et al (1990), on the other hand, approached the literature review and forms collection in order to solve an internal difficulty. A new charting

strategy required the coordination of the documentation system with an acuity programme, while at the same time, demonstrated evidence of professional and financial accountability. The authors based their documentation success on the new form's simplicity coupled with continuous inservice education and management support. The three day flow chart combined the six chart forms most frequently used by nurses on general care wards. The nurse charted information only once and in one place. If documentation was not completed in one sitting the nurse may saw at a glance what documentation remained.

The last theme encompassed the notion that the current documentation methods were not cost effective. The authors presented here focused on different aspects of cost containment as the rationale for having reviewed charting procedures. Comstock and Moff (1991) and Donnelly et al (1989) based the impetus to change on the shortage of nurses. This shortage created the need to review how nurses utilized their nursing time. Warne and McWeeny (1991) cited that quality assurance scores that demonstrated their present documentation system was inaccurate, lengthy and did not meet the needs of the nurses. Finally, Murphy et al (1988) cited the need for nurses to be more efficient and effective. All authors identified the inefficiency of narrative charting as the catalyst to design flow charts as the main communication tool. Secondly, all authors placed the flow chart as close

to the patient as possible. Only Comstock and Moff (1991) reported that the physicians had any concern for the placement of the flow chart. In this case the flow chart was placed directly outside patient rooms.

Although Canadian hospitals are not-for-profit institutions, funding for charting time is an issue as the exponential rise in hospital costs and the inability of the system to accommodate this function is a contemporary and critical issue. As a means to solve current documentation challenges hospitals cited in the review tended to introduce an objective flow chart representation of nursing care. There appeared to be two common themes in improving nursing documentation: flow chart format for ease of communication and the placement of the documentation as close to the source of activity as possible. Flow charts gave visual charting cues, were easy to read and to retrieve information from, provided trend data in graph format and were thought to decrease charting time.

Research

Most reports of research focused on the evaluation of a new charting method (Gryfinski and Lampe 1990; Murphy, Beglinger & Johnson, 1988). Unfortunately, the information was presented in such a manner that the report was classified as anecdotal in nature and, therefore, was considered in the previous section. Although there were many anecdotal books and articles

written about charting methods, research identified concerning nursing documentation was less prolific. Six research articles were reviewed. (Edelstein, 1990; Petrucci, McCormick, & Scheve, 1987; Schmidt, 1980; Sinha, Driedger & Dick, 1988; Renfroe, O'Sullivan & McGee, 1990; Tapp, 1990; Walker & Selmanoff, 1964).

In three studies, attitudes as a predictor of charting behaviours were explored (Edelstein, 1990; Schmidt, 1980; Renfroe et al, 1990). Both Schmidt and Renfroe et al explored the possible correlation between attitudes, norms and motivational levels towards nursing documentation. Edelstein, on the other hand, used a twenty item survey with questions about attitudes and knowledge about documentation. While Edelstein concluded that attitude was a positive predictor of charting behaviour, Schmidt and Renfroe et al did not support this conclusion. Schmidt failed to find any correlation between attitudes and norms as a predictive behaviour towards nursing documentation. Although Renfroe et al used the same theoretical model as Schmidt, the research findings were different. Renfroe et al found that documentation behaviour was influenced by subjective norms. Kessner Austin (1990), in a critique of Renfroe et al, pointed out that since the act of documentation was not an entirely volitional action, the legal requirement to have documentation on each patient may somehow have influenced the correlation between

subjective norms and documentation. However, this factor did not appear to have any bearing on the outcomes of Schmidt's study.

Two studies Walker and Selmanoff (1964) and Tapp (1990) explored nursing values as a factor that influenced nursing documentation. Within the framework of nursing as a function of the social fabric of the hospital Walker and Selmanoff studied the perceptions that three groups (i.e, register nurses, licensed practical nurses and medical students) had of the importance of nursing documentation. Tapp conducted semi-structured interviews of staff nurses to discover their perceptions about the value of nursing documentation. Walker and Selmanoff concluded that although they did not determine if nursing documentation was or was not highly valued, they inferred that since physicians rarely read the nurses notes that the notes were perceived by nurses to be relatively unimportant. It was found that the group who made the most referrals to the nurses' notes were the licensed practical nurses. This may have be a function of the time as the granting of permission for this group to write in the nurses' notes was a relatively new phenomenon. Tapp found that the nurses interviewed clearly identified that in nursing school, nursing documentation was presented as a responsibility of professional nurses. Although the nurse's individual philosophy had a major influence on actual documentation Tapp identified several external inhibitors

and facilitators that contributed to documentation behaviours. Tapp commented that the nurses seldom spontaneously identified facilitators to nursing documentation. It was, therefore, unclear if the list of facilitators was generated from Tapp's preconceived notions or truly represented the subjects' perceptions.

Petrucci et al (1987) studied factors that impacted the accuracy of nursing documentation. In a retrospective chart audit of residents in one nursing home the researchers reported that visual cues about urinary incontinence increased the likelihood that a patient care need would be documented. However, having had the visual cue on one chart form appeared not to have influenced the nurse's documentation behaviour on chart forms lacking the visual cue. A possible extraneous factor not explored was the potential influence on nursing documentation by the physicians. No comparisons of charting were made between the nursing documentation on charts where the physician had noted urinary incontinence as a problem and those who had not. However, since the study focused only on the charts it was impossible for the researchers to know whether the nurses were even aware of what the physicians had identified as medical problems.

The goal for researchers, Sinha et al (1988) was to develop and evaluate a logical, uncomplicated documentation scheme which permitted

nursing decisions to be documented at the time they were made. The nurses in the sample were not involved in the development of the new charting system. The researches used a pre test post test experimental design to evaluate the new charting procedure. The experiment was limited to one nursing unit with a staff of twenty five nurses. The researchers used three methods of data collection; chart audit, questionnaire and time survey. The study results showed that the nurses increased their rate of performing nursing assessments and documenting patient responses to the nursing interventions; that the chart audit scores increased; and that documentation time decreased. Although the post tests (i.e., three, eight and twelve months) were positive the researchers did identify that nurses experienced problems adapting to the new charting system. It was also evident that the researchers had ongoing interactions with the nurses after the implementation of the new charting system. The researchers did not report if they considered their ongoing involvement support possibly influenced the outcomes of the experiment.

Summary of Literature Review

Although the literature was divided into three distinct sections there appeared to be one grand theme that emerged. Philosophically, nursing documentation was recognized as an important tenant of professional nursing.

However, the realities of caring activities and the low value placed on nursing documentation frequently superseded the nurses's philosophical beliefs. There appeared to be a struggle between accepting a utilitarian strategy or professional strategy for documentation of nursing care. It was generally recognized that the current types of nursing documentation were inadequate for supporting the complexity of contemporary nursing. Use of a utilitarian philosophy for solving nursing documentation problems may perpetuate the listing of care activities undertaken by the nurse. Use a flow sheet format based on the utilitarian philosophy was said to decrease documentation time and to increase the ease of information retrieval, however, it was unlikely that the evidence of the planning of nursing care and the response to such care would be recorded. Use of a professional point of view philosophy for a documentation system included written evidence of the nursing process. Use of this type of system did not preclude the use of a flow sheet format but the information recorded would be based on nursing diagnoses, the planning and response to nursing care.

CHAPTER III: METHODS AND PROCEDURES

Sample

The sample consisted of all nurses' notes of patients admitted to one acute care pulmonary ward over a seven day period and who had a medical diagnosis of chronic obstructive pulmonary disease or pneumonia. Patients with pulmonary conditions required comprehensive charting against a variety of systems (i.e., cardiac or gastrointestinal) as their disease or medications to control their disease frequently affected other body systems. The period of data collection was limited so that a core set of nurses charted on the patients. Between two and six nurses were assigned to care for a patient in a twenty four hour period. The particular time was chosen so as to exclude as many nursing students as possible. This study was limited to the pulmonary conditions chosen as persons with these conditions were most commonly admitted to acute care pulmonary wards. Patients transferred from the intensive care unit were excluded as they represented extreme examples of pulmonary disease and usually required more intensive nursing interventions than those provided to patients admitted directly to the pulmonary ward from the community. Only one chart exceeded the average length of stay, however, the complications experienced by that patient did not

result in any specialized nursing care. There was no need for the introduction of specialized charting forms so the chart was included in the sample.

Procedure

Each chart was given an unique identification number. The "addressograph" section of each nurses note was covered over in such a manner that no identification of the patient could be made. Prior to making copies of the nurses' notes, the complete chart was read. This first reading assisted the researcher in the construction of a picture or a story of the patient's admission to hospital. During the subsequent readings the researcher made notes regarding pertinent information found on other forms in the chart (i.e., physician's order sheet, multidisciplinary progress notes and other documentation sheets). These notes aided the researcher in gaining insight into what should be present in the nurses' notes. These notes were placed in a file folder and stored in an accordion file created for each chart.

Two complete copies of the nurses' notes were made. Of this group, one complete set of nurses' notes was placed in safekeeping and one copy was used as a working copy. Prior to obliterating the signature, each nursing episode on the working copy was identified with the nurse's unique number, classification (i.e., registered nurse, licensed practical nurse, graduate nurse or student nurse) and status (i.e., full time, part time or relief). The names,

classification and status of each nurse was obtained from a list provided by the Nursing Manager. If the signature could not be identified, the episode was given a number that was greater than the highest number on the list provided by the manager. Identification of the nurse through hand writing analysis was judged by the researcher to be too inaccurate for this study. Data identified in this manner were used for only portions of the analysis of the required charting and freelance charting. All episodes were used in the required charting to determine the presence or absence of the element required. However, the unidentified episodes were not used when the researcher attempted to determine if the required element was consistently performed by the nurses. Likewise, this procedure was repeated in the content analysis of freelance charting when the researcher considered that the concept under analysis could be explored as a single entry. Once each episode was identified a final copy of each episode was made from the working copy. Each episode was sorted and numbered in chronological order. Finally, a coloured hi-lite pen was then used to outline the episode reviewed. For instance, if the episode reviewed covered the hours from 0700 to 1500 hours, the time column covering these hours were hi-lited.

In this study the identification of required charting elements or data was facilitated by a tick off rating sheet designed from the charting policies

and procedures of the institution. The required charting data collection permitted the researcher to become familiar, not only with the contents of the nurses' notes, but also with the charting guidelines. The Documentation Information Collection Sheet (See Appendix A) was organized to cluster similar activities into the following categories: 1) Demographic information; 2) General charting guidelines; 3) Admission documentation; 4) Ongoing documentation; 5) Patient transfer; 6) Medication information documented on nurses' notes; 7) Discharge information; 8) Pre-operative and post-operative documentation; 9) Documentation of unusual incidents; and, 10) Long term care documentation.

For each episode only those sections of the Documentation Information Collection Sheet required to capture information about the episode were used. The episode was read in its entirety before the researcher chose the appropriate Documentation Information Collection Sheet sections. The researcher then followed the outline of the Documentation Information Collection Sheet and searched for each element. The appropriate letter was circled as required (i.e., "Y" for present, "N" for absent or "NA" for not applicable). The process was repeated until all episodes were coded. Episodes were reread whenever the researcher posed a question about the required charting. Demographic data was collected from the nursing

admission history of each chart: 1) Date of birth; 2) Gender; 3) Marital status; 4) Occupation; 5) Educational level; 6) Whether the patient was a recipient of Respiratory Home Care program services; 7) Whether the patient had previous admissions for the present diagnosis; and, 8) Whether the patient had ever had hospital admission. Collection of such information was thought to provide the researcher with clues about what should be contained in the nurses' notes. The nurses' notes for the complete admission were used to capture as many and as varied types of possible interactions a nurse may have had with a hospitalized patient.

Each chart was systematically reviewed during the gathering of the required charting data. The completed Documentation Information Collection Sheet sections were then stapled to the copy of the episode. The stapled Documentation Information Sheet sections and the copy of the charting episode were stored in chronological order in the appropriate accordion file. Dated notes were kept of questions or insights and were reviewed whenever necessary. Interpretation of illegible writing in the nurses' notes was not an issue during this research. The few words that could not be deciphered did not dramatically alter the meaning of the nursing episode.

The analysis of the freelance charting began after reading all the nurses' notes for each selected chart. The second complete working copy of

each chart was then cut up and sorted into separate piles for each nurse. Each pile of entries was held together with a paper clip. Piles that contained more than one entry were again sorted into entries per patient. Finally, the piles containing more than one entry per patient were sorted into chronological order. For example, if nurse 11 had charted on only three patients five times, the nurse's large pile was sorted first by the unique patient number and then chronologically by the episode number. During each sort, notes were kept about which episodes were included as well notes about the content of the pile and how decisions were made about the concept. These notes were labelled with the name or some other identifier of the concept. At the end of each sort exercise, the piles were again sorted by nurse, clipped together with a paper clip and placed altogether in an accordion file. This process was repeated until no new mutually exclusive categories were identified (Brink & Wood, 1988; 1989). The piles were frequently resorted into the previously identified concepts so that any insights, that were not immediately perceptible, were brought forward (Brink & Wood, 1988). The data was examined for any charting similarities or differences based on the concepts identified. Attention was given to which type of nurse (i.e., classification and status) tended to chart or not chart on a particular patient and whether there were individual differences within each classification and

status. Attention was also given to whether a particular type of patient tended to have greater or lesser amounts of information recorded. For the large sorts such as required for the examination of the assessments, the researcher moved the piles around on the living room floor.

CHAPTER IV: RESULTS

Data Analysis

The analysis was divided into two sections: review of the required charting as per policies and procedures of the institution and freelance charting. All items in the Documentation Information Collection Sheet were considered categories of the required charting.

Required Charting

Twenty-seven categories were identified from the Documentation Information Collection Sheet. The first ten categories reflected the general charting guidelines used throughout the chart while the remaining categories reflected the guidelines pertaining to the nurses's notes. Where the guidelines overlap the category was reported in the general guidelines section.

Category: Nurses' Notes Stamped with Patient Identification

There were usually three occasions in twenty four hours when the chart pages were checked for patient identification. The Unit Clerk checked all charts at some point during the day shift, and provided stamped nurses' notes if required. The nurse assigned to the patient added a stamped sheet as required. Finally, the nurse who performed the 2400 Hour routine added stamped sheets as required. Of the 236 episodes or assignments, 67 stamped

nurses' notes were required. All nurses' notes were stamped appropriately. This did not preclude, however, a note from being stamped when the chart was prepared for filing in the Medical Records Department. All nurses' notes were checked for understanding and continuity. Except for two charts where there was no any documentation regarding the discharge of the patient, all charts appeared to be complete records.

Category: Entries Signed with Full Signature and Category

The charting guidelines mentioned this category twice. The guidelines also included a list of all acceptable categories and whether or not the specific category may be abbreviated. The four categories used in the nurses' notes were Registered Nurse (RN), Graduate Nurse (GN), Licensed Practical Nurse (LPN), and Registered Nursing Student (STN). For the episode to be considered correct each entry within the episode (i.e., all documentation done by one nurse during one shift) had to contain the complete signature and appropriate category. Of the 236 episodes only 156 were deemed correct.

All charts of nurses who had more than five episodes were reviewed for consistency. Of the fourteen nurses who had five or more episodes, only five nurses consistently signed both their name and category at the end of each entry. Four nurses did not appear to have any pattern to signing entries. For example, within one episode a nurse used the combination of full name

and category, initials only or full name and no category. Three nurses were consistent in signing their name and initial, missing either one signature or one category in all of their entries. One nurse used initials throughout with questionable use of the appropriate category on two occasions. Finally, one nurse used a combination of initials only and signature and category. A full signature and category was used frequently but not exclusively when the nurse made a reference to a medication or an intravenous infusion. Overall, nurses were more consistent with the use of full signature and category when recording a medication other than the inhalation medications, Ventolin and Atrovent.

Category: Legible Writing or Printing

Writing was considered illegible when the investigator could not, after many reviews, ascertain the meaning of the passage in which the word or words were contained. All other episodes made by the nurses who had illegible writing were reviewed, but the phrase or word was not repeated. There were two short entries in two episodes where writing was illegible. However, the overall understanding of what was recorded in the remainder of the episode could be understood.

Category: Professional Terminology Used

The charting guidelines stressed that professional terminology must be

utilized at all times. A partial list of acceptable professional terms could be found in the list of abbreviations that the researcher expected to see when a nurse charted about a person with a pulmonary disease. Taber's Cyclopedic Medical Dictionary (Taber, 1969) was used to determine the correct use of a medical term. Webster's Ninth New Collegiate Dictionary (Mish, Ed., 1989) was used to determine the correct use of a non-medical word. For the episode to be considered correct, all medical terms and non-medical words in the episode had to be used appropriately. There were 125 episodes where one or more terms or words were considered to be incorrect. The most misused word dealt with a common piece of respiratory equipment, the nasal canula. The misuse of the term accounted for the most errors in professional terminology. Issues surrounding the recording of the use of the nasal canula will be expanded under the section on abbreviations as the term was most often found as an abbreviation.

There were eighteen instances where the word "OK" was used. In two instances the nurse was stating the words of the patient, and, therefore, the use was acceptable. All other instances were viewed to be inappropriate. The word was consistently used inappropriately by two nurses to describe an adequate voiding pattern. The professional term that should have been used was voiding in "quantity sufficient" or "qs". The slang notation was also used

to describe the manner in which an intravenous was infusing as well as how meals were taken.

Several nurses used the terms "whezie" [sic] or "whezies" [sic] to denote an added breath sound. Taber (1969) described the term, wheeze as a whistling sound often created by the narrowing of the respiratory passageway. The sound was frequently present in asthma but may have resulted from any condition which produced bronchospasm. Although the word was misspelled, on all occasions the term was used correctly, the nurse was describing difficult breathing.

Two nurses documented that a patient had a brassy cough. According to Taber (1969) a brassy cough was heard in patients who had an aortic aneurysm pressing on the laryngeal nerve. The nurses did not notify anyone of their assessment and no medical information was recorded to support this finding, therefore, the term was considered to have been used inappropriately. It was of interest to note that the two nurses who used this term followed each other in the patient assignment. This example was one of the few occasions that appeared to be connected between episodes.

Taber (1969) did not have a definition for the term "crackles". However the word crackling was used to describe the medical term rale. Tabor described rales as an abnormal sound produced when air turbulence

was created by either retained secretions or spasm of the bronchi. The phenomenon was described as dry, or wet or crackling. The sound was said to disappear with expectoration. The term crackles was used by the nurses to describe an adventitious breath sound regardless of the patient's diagnosis or the area of the lung in which the sound is heard. There was no documentation by any nurse as to whether the sound remained or disappeared following a cough. It was important to note that the term is also used in the same manner by both physicians and medical students as recorded in the medical progress notes.

Other inappropriate words used were "tummy" instead of abdomen, "gurgly" as a descriptor of wet breath sounds, and "alot" [sic] which indicated a high frequency. The term diaphoretic was used inappropriately twice to describe a patient who was sweating profusely rather than to describe the agent which brought about the sweating. When checking for peripheral pulses one nurse referred to pulses felt in the "bilateral dorsalis pedis" or that a medication was applied to "bilateral groins". In the former example, the pulses were palpated over each dorsalis pedis artery (i.e., the use of the term bilateral dorsalis pedis was inappropriate). Again, in the latter example, the medication was applied to both groins.

Category: Abbreviations According to Guidelines

In order to minimize errors in communication or understanding, the application of abbreviations in nurses' notes should be limited. Several conditions had to be met prior to the use of an abbreviation: 1) the reader had to understand the intent of the abbreviation; 2) the handwriting must be legible; 3) only one possible meaning was derived from reading the abbreviation; and, 4) the abbreviation had to be included in either the charting guidelines or the approved unit list. A formal process was in place not only for approval of unit specific abbreviations but also where the approved list was to be kept. The Nursing Manager acknowledged in a telephone conversation that the unit, from which the sample of charts was taken, did not have a list of approved abbreviations (personal communication, January 27, 1993). Since no approved unit specific abbreviations were available all charts were reviewed against the list found in the guidelines. The correct name of the piece of respiratory equipment (i.e, nasal canula) was verified by the Manager of Respiratory Services (personal interview, June 10, 1993). All abbreviations contained in the episode were required to be correct for the episode to be deemed correct.

Of the 236 episodes reviewed only 26 were found to contain only those abbreviations found in the guidelines.

It was important to note here that in the episodes deemed to be correct either the patient was not on oxygen or the delivery route (i.e., per nasal canula) was not mentioned. Seven episodes did not use any abbreviations while the most abbreviations used in one episode was 58. The latter example did not meet the criteria of limited use so as to prevent misunderstanding by the reader. Of the remaining 203 episodes only one nurse used an abbreviation that could be identified as possibly referring to a nasal canula (i.e., n/c). Two abbreviations (i.e., N/S for nasal specula and Sl for slight were assigned different meanings in the established abbreviations list, and, hence were not to be used. NS was the accepted abbreviation for Normal Saline and Sl designated the medical term, sublingual.

Nurses frequently used a set of abbreviations as a system of organizing the documentation of an initial assessment. Of the abbreviations used for this purpose, only CNS (i.e., central nervous system) was identified on the approved list. The remaining abbreviations (i.e. CVS, RESP, GI, GU) were not approved. The four episodes documented by student nurses also included the identical set of abbreviations used by the Registered Nurses.

Category: Errors Handled as Per Guidelines

Corrections of errors included the following directions: 1) erasure liquid were not to be used to obliterate an error; 2) the word or words to be

corrected were to have a single ink stroke drawn through; and, 3) the date, the nurse's signature and the word error must appear above the incorrect word or phrase. Of the 27 errors identified none of the corrections met the guidelines. For instance, none of the corrections contained the date, and most omitted the signature of the nurse. Several nurses placed their initials above the corrections. Nurses may have ignored the guidelines completely and simply written over their error. This often occurred if the nurse was correcting a spelling error or inserting an omitted capital letter to begin the first word in a sentence. The charting guidelines used as reference in this study were revised in 1992. Since no nurses were able to deal with an error accurately, the process they used may have been in place prior to 1992 and the nurses were not aware of the change.

Category: Nurses' notes in Non-Erasable Black Ink

This was not noted prior to photocopying of the nurses' notes and no further comment can be made.

Category: Documentation in Chronological Order

For ease of understanding for the reader it was important to have nursing information documented in chronological order. All charts were reviewed to determine if the flow of information was sequential. This review did not examine any entries that were prefaced by the words Late Entry as

this type of documentation was handled as a separate category. On occasions where block charting was used incorrectly the researcher was unable to determine if the documentation is in chronological order. This uncertainty was most often found in the episodes occurring during the night shift (i.e., 2300 hours to 0700 hours). For instance, the nurse documented that the patient was sleeping on hourly rounds. This statement was usually be the first entry in the block. This statement was then followed by information about the patient having used the commode or having received an inhalation treatment. The researcher could not determine the point at which the patient used the commode or received an inhalation treatment.

Category: Blank Space Marked by an Oblique Line

There were 36 episodes where the nurse was required to deal with a blank space. On only four occasions did the nurse carry out the guideline correctly. All four occasions were to block out a blank space left on the nursing history. A nurse who followed the guideline on the nursing history did not necessarily carry this action forward to other blank spaces. Of the remaining episodes, 18 nurses drew one or several inappropriate lines and 14 nurses left one or more lines blank. Of the episodes left blank, in all but one instance the last line of the nurses' note was left blank. Frequently the writer completed the entry on the next page.

Category: Documentation of Observation/Assessment of Patient

The charting guidelines required the nurse to make, at two hour intervals, that the patient had been observed or assessed. Since no special vital signs sheets were used, the researcher expected all assessments and observations to be recorded on the nurse's notes. Of the 236 episodes reviewed 25 were shown to have a gap in time, (i.e., time between observations was greater than two hours), while in 32 episodes the time interval could not be assessed. This inability to assess time intervals resulted either from nurses not following the charting guidelines for Block Charting or simply that the interval covering the block charting was greater than two hours.

Category: Documentation Extending to a New Page

The nurse was required to sign the entry on the last line of the full page and again at the end of the entry on the new page. This procedure was required in 96 episodes. Problems occurred in 37 episodes where the common faults were no signature or category or the nurse initialled the entry at the bottom of the full page. Some nurses prefaced their signature on the first page with the contraction, cont'd. There were no guidelines concerning the use of this word. However, the probability that the reader recognized that the documentation extended to a new page seemed to be greater if the

contraction was used.

Category: Designation of New Day

At midnight the nurse was to draw a line immediately under the last entry of the day and enter the new date in the Comments and Observation column. The line was not required if the last entry occupied the last line of the nurses' notes. Of the 79 instances where the full procedure was required, 20 instances were correct. The most common errors were to put the new date in the Treatment or Procedure column or to draw a line above and below the date. In all episodes it was relatively easy to determine the start of the new day as the initial entry was a single, timed entry prior to midnight with subsequent entries designated after 2400 hours.

Category: Current date on Top of Each Page

Both sides of the nurses' notes had as a visual cue, the word, DATE, next to which the date was to be recorded. The date was required to be entered on 111 occasions. In five cases the date was missing, illegible or incorrect.

Category: Horizontal Line Preceding Signature

The nurse was to draw a horizontal line preceding the nurse's signature and category. This activity was done in order to prevent charting occurring after the fact. To be correct, all instances in the episode had to be

completed. There were 14 episodes without gaps between the end of the documentation and the signature and category. Of the remaining 122 episodes nurses followed the procedure 91 times. In the remaining 31 episodes, nurses left the space between the documentation and their signature blank or went to a new line, left an open space and then signed the entry.

Category: On Pass Charting Procedure

A notation was to be made once in twenty four hours if the patient was on pass. The statement Patient remains on pass was used in 15 episodes. Each nurse assigned to the patient entered the required documentation. This resulted in multiple entries within the twenty-four hour time period. There were no guidelines as to which nurse was responsible for making the statement, and it was unknown if the nurses involved were aware of the actual time frame in the guideline.

Category: Concise Documentation

Mish (1989) defined the term concise as brief and free from any embellishment. Out of the 236 episodes, 173 were found to fit this description. In this study, the recording of a brief or concise nurse's note did not necessarily lead to a complete understanding of the patient's status. The documentation most often reflected a list of activities the patient was observed to do throughout the shift without any outcomes of the care given.

Category: Charted by Person with First Hand Knowledge

Since no person had stated that the observations, care or response to care was observed or acted upon by other staff members, it had to be assumed that the nurses recording the information had direct knowledge of the event. There was one event where it was clearly identified that a nurse, other than the assigned nurse, assisted the patient and documented the care. On one occasion, however, it was difficult to determine if a patient returning from the day ward following a bronchoscopy at 1330 hours was assisted prior to the 1400 hour activity recorded on the nurses' notes. This uncertainty arose due to the content of the documentation occurring at 1400 hours. This was the first entry upon the patient's return to the ward and the nurse does not include any information concerning the return to the unit. The charting guidelines required the nurse to document the time of return to the ward in an outdented fashion. Therefore, one cannot rule out the possibility that someone else transferred the patient to the bed, but did not check the vital signs.

Category: Define Level of Nursing Observation as Per Policy

No patients required a statement regarding the level of nursing observation.

Category: "Late Entry" used Appropriately

Documentation was to follow the act of nursing care and to be recorded as near as possible to the time of occurrence. Although no time interval was given, the nurse was to identify a lapse of time between the act of nursing care and the time of documentation. This lapse was to be identified by the words, Late Entry, written in the Treatment or Procedures column of the nurses' notes. Since no direct observation was carried out one must assume that the nurse recorded the nursing care within a reasonable amount of time. When significant lapses of time were easily identifiable, an entry had been made by the respiratory technologist which preceded the first entry of the nurse. In citing the example below, it was clear that the nurse's first priority was to care for the patient during a respiratory emergency and then to document the nursing care and outcome of such care when time permitted. The entry time for the arterial blood gases drawn by the Respiratory Technologist was 1808 hours. This entry was followed by the nurse's first entry which identified the incident as occurring at 1745, that the head of the bed was raised, the patient was suctioned orally, an inhalation treatment started, an arterial oxygen saturation test done, an intravenous was initiated and medication given. The nurse's next entry was at 1830 hours and noted that the patient was no longer short of breath and that the arterial

oxygen saturation level had risen. Since the 1745 entry was not prefaced with the late entry designation, the researcher inferred that, for the nurse, the event occurred over a forty five minute period. The first opportunity the nurse had to record the events was close to 1830 hours when the problem had resolved.

There were two examples when the designation late entry was used inappropriately. One nurse labelled an entry as late when the entry was clearly a block charting entry. In the second example, the nurse began the entry with a block charting designation and then instead of putting the time of the treatment in the body of the note, placed the late entry designation next to the time written in the Time column.

Category: Block Entries Used Appropriately

Charting by block entries was a charting method by which the nurse recorded a block of time in the time column (i.e., 1100 - 1500) and then recorded the times of treatments, observations and outcomes within the Comments and Observations section of the nurses' notes. The nurse's signature and category signifies the end of the entry. All episodes of nurses using this documentation method were reviewed for completeness and consistency. Block entries were most frequently used by nurses on the night shift. This documentation method usually followed the initial timed entry at

the beginning of the shift. For a patient who had an uneventful night the documentation would often consist of one statement (i.e., Appears to have slept well on q1H rounds. Signature/Category). However, when the information continued within the body of the documentation was more detailed, the procedure was not followed as outlined in the guidelines. For instance, a nurse documented that a patient had a bowel movement, used the commode twice, was short of breath on exertion, and had an intravenous infusion. There were no times within the body of the entry; therefore, one cannot determine the time of events or if any of the events listed were connected (i.e., was the shortness of breath occurring when the patient was using the commode for a bowel movement).

Category: Cumulative Entries Used Correctly

The aim of the cumulative documentation approach was to allow the nurse to record events in a cluster at a time well into the shift. The time of each treatment or observation was recorded in the time column. The full signature and category of the nurse was placed only after the last entry of the series. Nurses used this approach several times within one episode. Of the 236 episodes reviewed this approach was used correctly 30 times, incorrectly 14 times and not used 192 times. Two nurses tended to use the cumulative documentation approach as their major charting method.

After the initial signed assessment, one nurse documented all the remaining observations and treatments by the cumulative approach. It was apparent that the second nurse used the approach only when required. For example, the nurse made a cumulative entry covering the time from 1530 hours until 1800 hours. This entry included documentation about both the initial assessment, medications given and routine nursing care. Such an entry possibly represents the first opportunity the nurse may have had to record information.

Category: One Time Entries Used Appropriately

This approach was comparable to the Cumulative Entry approach except that the nurse recorded only one time in the time column and one entry in the comments and observation column. There were 152 examples of this documentation approach, with 122 examples judged to be correct. The most frequent error dealt with an incorrect signature (i.e., initials only) or no category. This method appeared to be the preferred method of charting.

Category: Information to be Outdented

Outdenting referred to starting the statement in the Treatment or Procedure column and completing the statement within the body of the comments and observations column. No rationale for this procedure was given in the guidelines. However, when it was used correctly, the reader's attention was quickly drawn to a specific event. There were twelve

parameters to be recorded in the outdented fashion. Since this review dealt with what pulmonary nurses charted, the documentation of oxygen therapy was subdivided into several categories. Except for the recording of oxygen therapy, the item need only to be outdented to be correct. In the case of oxygen therapy all information had to be included (i.e., flow rate and delivery system) to be correct.

There were 18 documented occurrences of a change in the patient's status. Of these, five were charted correctly in the outdented fashion and 13 were not. Of the 18 occurrences, the nurse recorded only four times that the physician had been notified. Since nurses recorded the notification of the physician on only four occasions, it was unclear to the researcher, if the nurses did not perceive the change to be serious enough to warrant a call to the physician or that the notification was left undocumented. Of the four entries recording a call to the physician only two were correctly outdented.

Documentation of specimen collection occurred in ten instances. Of these ten, only one followed the outdenting procedure. There was one example of an order to collect a sputum specimen for which no supporting documentation could be found.

Five patients had a DAT diet (i.e., diet as tolerated) ordered on admission and no diet changes were ordered throughout their hospitalization.

Therefore, no outdented documentation was required. One patient was ordered a NAS, low cholesterol diet (i.e., no added salt) which was maintained for the duration of hospitalization. Again, no outdenting documentation was required. The patient who was unconscious had been ordered clear fluids for the purpose of administering medications. Once it was determined that the patient was incapable of swallowing safely, the order was changed to fluids by a nasogastric tube. None of the three diet changes for this patient followed the outdenting routine.

In the safety measures assessment/application category, nurses documented on 55 occasions about some aspect of safety. The documentation centred on the use of side rails and the call bell being within reach. There were five occasions that were correctly outdented while the remaining 50 occasions were not. On only one occasion did the nurse document the safety application related to an assessment (i.e, patient had just received a dose of an antiemetic and the side rails were raised).

On 15 occasions the nurse had documented the routine visit of the physician. Nine of these occasions were documented correctly by outdenting the physician's name. Traditionally, the nurse-in-charge accompanied the physicians when the routine medical rounds of the unit were made. However, there was no evidence that this practice was carried out as none of the entries

documented were signed by a nurse other than the assigned nurse. What appeared at first glance to be missing documentation may have actually represented a significant number of occasions when the assigned nurse was not present with the patient at the time of the physician visit.

Fifty percent of the entries in the diagnostic procedures and treatments performed were related to the recording of the inhalation treatments given. On 56 occasions the entries were correctly outdented, while in the remaining 62 occasions the oudenting procedure was not followed. The majority of the inhalation treatments documented were timed medications. The nurses recorded that the medication was given but gave no indication about the patient's response to the medication. Use of Ventolin, on an as required basis (PRN), was infrequently recorded on the nurses' notes. The researcher was required to read the medication record to confirm that the medication had been given. In reviewing the documentation of nurses who had recorded more than five episodes, there was an inconsistency in the outdenting of treatments even within a single episode recorded by the same nurse.

There were 29 instances where nurses recorded giving PRN medications. The entry was correct on only nine occasions. When an expected entry was missing altogether, it was evident, by having read the medication sheet, that a nurse, other than the assigned nurse, had given the

medication. There was no documentation that the assigned nurse then followed up with observations or responses to the patient having received a medication.

Only one patient was transferred off the unit and the required special patient transfer form was incomplete. The specific transfer information documented on the nurses' notes was complete for only the destination and time of transfer. The information was not recorded in the outdented format.

Transports off the unit were recorded eight times. In addition to outdenting, the statement was to include information about purpose, destination, time, mode, and return. None of the entries contained all the required information and seldom was the statement outdented.

The charting guidelines included the initiation and discontinuation of intravenous therapy as elements required to be charted in the outdented format. There were six incidents where a nurse attempted to cannulate a vein for an intravenous infusion. Of these six incidents, only two were charted in the outdented mode. There were five incidents where the documentation indicated that the intravenous infusion was discontinued. In all five cases the documentation was incorrect. There was one case in which the nurse charted the observation that the intravenous was clotted and not infusing, but did not document the outcome of such an observation such as

removal of the cannula and dressing the needle site. There was no other comment in the nurses' notes regarding the intravenous. A physician's order indicated that the intravenous antibiotic was discontinued and an oral drug was substituted. One must assume that the nurse discontinued the intravenous.

For convenience, the entries involving oxygen therapy have been organized into the following categories: 1) oxygen therapy was in use and no changes during the shift, 2) therapy initiated, 3) oxygen concentration adjusted, and, 4) oxygen therapy discontinued. On 125 occasions there was no reference to oxygen. In most cases this represented the episodes when patients did not require oxygen therapy. There were 111 occasions where nurses had documented the use of oxygen therapy. All references to oxygen therapy had to be correct within the episode for the episode to be correct (i.e., outdented and included the flow rate and the method of administration). On only two occasions was the documentation correct. Most frequently, the recording of oxygen therapy was contained within the body of the initial assessment and in the summing up statement in the last entry. Since the majority of patients on a pulmonary unit would have had oxygen therapy at some point in their hospitalization the nurses may have seen the therapy as routine and not as a special case to be outdented.

The initiation of oxygen therapy was taken to mean that a patient required oxygen after a period of time without the need for oxygen. This definition excluded those entries where the patient had the oxygen off for short periods of five to ten minutes. On three occasions nurses documented the initiation of oxygen therapy. Of the three occasions only one entry contained the necessary elements. Change in the flow rate of oxygen was documented 11 times. These changes were most frequently the result of the nurse having performed an oxygen saturation test and determined the percentage of oxygen in the blood. Of the 11 cases where documentation occurred only two cases were correct. The procedure of testing the saturation level and adjusting the oxygen flow rate may have be seen as a single two-step procedure and hence, the information was recorded as one unit. There was no information in the guidelines to deal with this situation. Finally, the discontinuation of oxygen therapy was recorded on six occasions. None of the entries was correctly charted. On one chart the information was absent. However, the researcher ascertained that the therapy was discontinued sometime between 1900 hours and 2245 hours on the day of admission as no other nurse referred to the oxygen therapy.

Category: Evidence of Ongoing Patient Assessment and an Evaluation of Measures to Assist the Patient to Meet His/Her Needs

This category contained two concepts, patient assessment and evaluation of measures used. At the onset of the two major shift changes (i.e., 0700 hours and 1900 hours), the nurses performed an assessment which used a body systems framework. During these assessments there was no evidence that the information obtained was used to evaluate ongoing nursing measures. On one occasion during the shift, a nurse had charted that the portable oxygen was increased to assist the patient during a period of activity and then reduced when the patient was resting. The documentation clearly outlined the signs and symptoms which led the nurse to increase the oxygen flow rate. When the activity was over the nurse recorded an assessment which indicated that the patient could tolerate a lower level of oxygen. There were no other occasions where there are evaluations of measures used.

Category: General Observations of the Patient Related to Personal Habits

Personal habits included those activities the patient would normally do at home such as reading, or taking an early morning shower. Other observations focused on personal objects that were close at hand such as a

radio, grooming kit or books occupying the bed side locker. On 52 occasions nurses recorded some aspect of patient activities suggestive of a personal habit. Personal habits were most frequently recorded when the patients were able to move freely about the unit and required little physical nursing care. For instance, an initial assessment was recorded and then the remaining documentation for that episode recorded aspects of personal habits.

Category: General Observations Regarding Level of Health

An assessment of the level of health was considered an outcome of a group of specific observations which led the nurses to make the statement. A patient who was described as having bruises over both her arms, poor skin turgor and was thin and frail was considered to be in poor health. On 14 occasions the nurse recorded information regarding the level of health. On one occasion a comment about the patient's level of health was made at the time of discharge. However, there was no specific observations documented to lead the reader to conclude that the patient was indeed in fair condition. This was the first time this patient had been assessed as being in fair condition.

Category: Evidence of Reason for Omission of any Treatments

In the charts reviewed, the inhalation medications were charted on a treatment sheet. The treatment sheet was identical to the medication record

except that the word Treatments was written at the top of the sheet. On four occasions the treatment sheet was not signed and no evidence was given to support a reason for the omission. In these episodes the status of the patient did not appear to change, and, therefore, it was reasonable to assume the missed signatures merely represented a forgotten signature rather than an actual missed treatment. In one chart the physician had ordered the patient to be taught deep breathing and coughing. There was no evidence that any nurse had taught the patient or that the patient was observed or assisted. The nurses may not have considered deep breathing and coughing a special treatment, hence, not recorded the breathing exercises on the treatment sheet. Generally, on a pulmonary ward, the teaching of deep breathing and coughing exercises were considered a nursing routine rather than a physician's order.

Freelance Charting

The charts were reviewed for content analysis. The beginning categories were derived from the Documentation Information Collection Sheet. However, it was evident that there did not appear to be any consistent connection or relationship between the data collected at the time of the initial assessment and that of the information documented for the remainder of the episode. This isolation or disconnectedness was also evident between

episodes. As a consequence, the results presented in this section have been divided into discrete segments which reflect the identified categories.

Initial Assessment

There was a definite difference in the type and content of information documented at different times throughout the twenty-four hour period. The content of the episodes reviewed were categorized according to the time the episode commenced: 1) 0700 hours, body systems assessment with or without a psychological assessment; 2) 1500 hours, body systems assessment if the nurse was starting a seven and three quarter hour shift; 3) 1500 hours, incomplete body systems assessment if the nurse was starting a four hour shift; 4) 1900 hours, body systems assessment similar to the 0700 hour assessment; and, 5) 2300 hours, no body system assessment with or without information about oxygen therapy or treatments. There did not appear to be any significant difference in the initial assessments at 0700 hours or 1900 hours regardless of whether the nurse was working a short or long shift. Within the initial assessment there were several sub categories identified; 1) routine assessments that contained statements divorced from activity; 2) individual assessments with nursing follow up; 3) individual assessments with no nursing follow up; and 4) no assessments. Each assessment period has been presented according to the sub categories outlined above.

Assessments at 0700 Hours

Possible assessments = 75.
Routine assessments = 52
Individual assessments with nursing follow up = 6
Individual assessments with no nursing follow up = 16
No assessment = 1

Routine assessments consisted of a clinical review of the patient organized by body systems. The information contained in the initial documentation did not form the basis for any other comments written throughout the episode. The information was not used to compare the patient's progress over the course of the episode. For instance, nurses frequently charted that the patient was short of breath on exertion. This finding was a major defining attribute of impaired gas exchange of oxygen and carbon dioxide. The nurses made no further comment about this finding and did not document any nursing actions that had been undertaken to reduce this symptom.

Nursing follow up was considered to have occurred if the nurse identified a problem and subsequently made a comment about what was done to rectify the problem. For instance, a nurse identified that a patient was experiencing pain and that a medication was given. A further example was the discontinuation of oxygen as the nurse had recorded that the oxygen saturation level was too high. On both these occasions, however, the nurse

failed to document the outcome of their nursing actions. The researcher did not know if the patient obtained relief from the medication or whether the patient maintained an adequate oxygen saturation level on room air.

Nursing follow up was considered to be absent if the nurse identified a problem but no other documentation occurred in relation to the problem. There were three types of problems identified: 1) a problem which occurred in an unstable patient, 2) a problem which occurred for the first time in a stable patient, and 3) no connection to or comparison of assessments if the nurse had the patient on successive days. In the first instance, a nurse documented that an unconscious patient with aspiration pneumonia had a subnormal temperature and did not record what nursing action was taken. In the second type, nurses charted clinical findings such as no air entry in one lobe, that one pedal pulse was absent or that the patient was unable to see. In the final type, on the first day a patient had a major bowel problem which required medical intervention. On the second day the nurse did not mention the status of the patient's bowels in any assessment.

Assessments for 1500 - 1900 Hours

Possible assessments = 15
Routine assessments (complete) = 0
Routine assessments (partial) = 10
Routine assessments that do not mention respirations = 5
Individual assessments = 0

Of the partial assessments done the following clinical information was recorded:

- auscultation of the chest = 1
- alert and orientated = 3
- SOB/not SOB = 3
- Respirations unlaboured/free and easy = 3
- Comments about skin = 4

The assessment may have included one or more of the parameters listed above. Only one nurse was assigned twice during this time frame. On both occasions, no information regarding the patient's respiratory status was documented. There was no individual assessments with or without follow up documentation.

Assessments for 1900 - 2300 Hours or 1900 - 0700 Hours

Possible assessments = 48
Possible assessments between 1900 - 2300 hours = 14
Possible assessments between 1900 - 0700 hours = 34
Routine assessments = 30
Individual assessments with nursing follow up = 5
Individual assessment with no nursing follow up = 10
No assessment = 3

In the examples of nursing follow up after an individual assessment, it was not apparent that the documentation reflected all the nursing actions undertaken to solve the problem. On two occasions the perceived problem was commonly identified as a consequence of advanced respiratory disease. For instance, one nurse remarked that a patient was confused and then the

nurse puts the bed side rails up. There was no documentation as to what the nurse did to determine the cause of the confusion or if there were possible nursing interventions to eliminate or mitigate the problem. In a second example, a patient made a disparaging remark about wanting to die as life with pulmonary disease was too distressing for her. The student nurse then charted that positive reinforcement was given. No other documentation of the conversation between patient and nurse was found to assist in the explanation of positive reinforcement. In the last illustration the problem was directly related to the respiratory condition. The nurse decreased the oxygen flow rate as the oxygen concentration was above the parameter set by the physician. In keeping with the earlier assessment, the nurses failed to document the outcome of the identified problems.

The nurses who performed the assessments at 1900 hours identified similar physical, mental or emotional problems as those identified by the nurses at the 0700 hour assessments. Like the earlier assessments, no information was included about the outcomes of their assessments. Also similar to the morning assessments, the evening nurses did not incorporate the ongoing problems identified on the previous shift in their initial assessment. For instance, the last entry of an episode identified that a patient had reported having had several bouts of diarrhoea throughout the shift. The

evening shift nurse did not record any observation or conversation with the patient regarding further diarrhoea episodes. This nurse also assessed the patient for mild back pain. Again, there was no evidence that the nurse considered this to be an ongoing problem. However, no analgesic was recorded on the medication sheet during this period of time.

Assessments for 2300 - 0700 Hours

Possible assessments = 49
Routine assessments that mention respirations = 19
Routine assessments that do not mention respirations = 17
Assessments that mention respiratory equipment only = 10
Individual assessments = 3

Routine assessments about respirations included statements such as respirations free and easy, unlaboured, or no cyanosis noted. There were no instances recorded where the nurse auscultated a patient's chest. These statements may or may not have been accompanied by other routine statements about sleeping such as appears to be sleeping or sleeping well at the moment, or by a general summary statement like in no apparent distress. In the absence of any other severe respiratory or circulatory signs or symptoms, it was striking to note that nurses chose to comment on whether the patient had cyanosis. Without lighting similar to that of daylight, it would be exceptionally difficult to identify cyanosis, therefore, it was unclear why such a parameter was chosen.

Routine assessments that did not mention respiratory status may have included mention of an intravenous infusion. Usually in the summary statement at the end of the shift, the nurse identified the intravenous infusion to be that of a bronchodilator medication (i.e., aminophylline). There was no connection between the therapeutic action of the medication and the patient's respiratory status. Nurses were most likely to have made no comments about the respiratory status of patients who were independent, did not require extraneous oxygen and who were frequently in the lounge at the beginning of the shift.

In reviewing the documentation contained in the three individual assessments it was evident that the nurses perceived changes in the status of the patient. Unlike the morning assessments, the three nurses whose documentation was identified as being individualized, continued to record their ongoing assessments. For instance, one nurse continued to measure the oxygen concentration and to adjust the oxygen flow rate to keep within the parameters set by the physician. In the second example, the nurse recorded the changing types of respirations found at rest and activity such that the reader had a clear picture of the patient's degree of disability. In the final example, the nurse remarked on the degree of shortness of breath when the patient used the commode for a bowel movement.

Multiple Episodes Documented by One Nurse

Of the 236 episodes reviewed, there were 12 nurses who documented five or more episodes for a total of 104 episodes. The documentation was reviewed for similarities and differences. Each nurse had a distinct method of charting that could be identified as belonging to that nurse. The most striking documentation feature between nurses was the inconsistency in charting the inhalation treatments in the nurses' notes. Variations included the recording of: 1) each treatment whether it was timed or PRN; 2) PRN treatments only; 3) some of the treatments within one episode; or 4) no treatments at all. Nursing identifiers could be standard phrases such as oriented to three spheres that the skin was pale or pink in colour, or that the respirations were rhythmic. Of interest were the recording of the notes of the patients who deviated from the nurse's usual identifier phrases. In such cases the same nurse either failed to make a comment, as in the omitting the level of consciousness in the unconscious patient or made a value judgement regarding skin colour as in a native patient (i.e., skin was good in colour). In the latter phrase example, the significance of the word, rhythmic which described the respirations was not made clear. All normal and abnormal respirations, except that of respiratory arrest, have some form of rhythm or cadence. The phrase was also frequently combined with the phrase no

cyanosis noted. Although the nurse did not actually state that the respirations being assessed were normal it appeared that the nurse was describing normal respirations.

A second type of nursing identifier was phrases with a legal focus. Two nurses used phrases such as no voiced concerns or no voiced complaints at the end of each entry within the episode. In essence, the nurse was saying that since the patient had not identified a concern or complaint then no concern or complaint existed. There was no indication whether the nurse actually asked the patients if they had any concerns or complaints.

A third type of nursing identifier was the use of a negative expression that signified a body system was assessed to be within the normal limits. One nurse ended all five assessments with the phrase denies difficulty with voiding or having a bowel movement. The nurse did not refer to any other body system in this manner.

A fourth type of nursing identifier was the "apparent" observation. Such phrases as no apparent distress or appears to be sleeping were examples of this category of documentation. This may have represented a long standing practice whereby nurses were to state observations only but not the outcomes of those observations. For example, one nurse charted vital signs stable, respirations even and unlaboured and finishes with in no apparent distress.

In the professional judgement of the nurse, the data identified should have led the nurse to the logically conclude that the patient was not in any distress, and, therefore, the word apparent was redundant.

A final type of identifier was the description and position of where the nurse heard adventitious breath sounds. The descriptions ranged from general descriptions such as decreased air entry with crackles to the lower lobes to a very specific description such as decreased air entry to the left middle lobe. For those nurses who charted on more than one episode they tended to report their findings in the same manner each time. One nurse erroneously described the lobes as "frontal" "back" and "lateral".

Evaluation of Ongoing Measures to Meet Patient Self Care Needs

To evaluate means to determine the importance or quality of something through judicious assessment and deliberation (Mish, 1989). The contents of the nurses' notes were reviewed for words or phrases that described an outcome of a nursing intervention and the reasons for how or why the intervention was or was not successful. The evaluation of ongoing measures were subdivided into four categories: 1) evaluation of drug therapy, 2) evaluation of comfort measures, 3) evaluation of a nursing action specific to an identified problem, and 4) general summary statement at the end of a shift. Of the 236 episodes there were 11 instances where the nurse appraised

the ongoing measures to meet the patient's self care needs. One nurse documented two evaluations of ongoing measures within one episode.

The evaluation of drug therapy was considered to be effective or ineffective. The information could be conveyed directly by using the words with effect, or indirectly, by recorded observations of the patient following a nursing intervention. There was only one example of an evaluation of a timed medication. On the fourth day of admission, the nurse documented that a timed dose of inhaled medication was given with effect, expectorating frothy mucous. There were two instances where nurses documented that, PRN, medications were administered to relieve an untoward situation. In the case where the nursing actions were effective, the nurse recorded the actions carried out following a coughing episode (i.e., assisted the patient to bed, raised the head of the bed and administered a bronchodilator inhalation treatment) and then recorded a general observation about the patient Now settled. Respirations less laboured. The nurse was implying that the actions brought about a change in breathing. In the final example, the patient continued to experience back pain over the course of the episode. Although the documentation was considered to be incomplete, the researcher understood from what was written that the nurse had appraised the situation and had undertaken further action and alleviated the problem. In this case

the nurse had given the patient an analgesic for back pain earlier in the evening. Several hours later the nurse recorded States tylenol plain helped a bit for pain in back. Four and one half hours later the patient was given a narcotic analgesic for back pain. Two and one half hours later the nurse then recorded giving Tylenol plain given for back pain. States morphine didn't help too much. In the last comment at 0640 hours the nurse recorded an observation that the patient was sleeping at the moment. The pain had been controlled to the point where the patient slept.

The second category dealt with comfort measures. There were four occasions when the nurse focused on a comfort measure. On two occasions the nurse actually used the word comfort to describe the patient's response. In the first illustration, the nurse documented that the express purpose of the nursing action was to bring about comfort. The nurse followed this statement by recording the patient's response, States is comfortable. In the second example, the nurse recorded that the patient was comforted by having a shower even though the patient felt tired after the event. In the third case, the nurse indirectly referred to comfort when stating the patient feels happy with a move to a quieter room and had settled to room. Lastly, the nurse described a patient who was very upset, that support was given and finally that the patient was now calmer.

The third category surrounded issues of problem identification and nursing action. A nurse who had just recorded the results of an effective inhalation treatment went on and recorded that the patient was rather difficult to transfer --- 2 man works best. It was evident that a second nurse had just assisted with the transfer of the patient. The final two comments were about shortness of breath but the approach to evaluation of the nursing action was distinct. In the first instance the nurse assisted the patient to the washroom. In the process the patient becomes very short of breath. The nurse increased the oxygen during the activity and then reduced the level of oxygen when the activity was completed. The nurse then recorded that the activity was tolerated well. This was the nurse's evaluation from a clinical or observational point of view. On the other hand, the second nurse readjusted the head of the bed to assist a patient who was short of breath. The nurse then recorded the evaluation in both clinical, observational terms and also in the personal, perceptual terms of the patient, commenting that although the shortness of breath remained the patient indicated improvement.

In the last category the nurse provided a summary statement at the end of a shift. The nurse used observations such as state of arousal (i.e., sleeping) and the rate and nature of the patient's respirations to draw the conclusion that the patient appeared to be comfortable.

Concept of Refusing Nursing Care

According to Mish (1989) to refuse was to reveal or communicate a reluctance to perform or to conform with an expectation. There were seven instances where the word refused was documented. Six of the instances dealt with the refusal to continue oxygen therapy. In all examples, the nurses gave a clear, objective measurement which indicated the reason why the patient did not require the use of oxygen (i.e., the oxygen saturation level was within the range ordered by the physician). However, the manner in which the documentation was written, it was interpreted to mean that the patient should have continued to have oxygen therapy. In the final example, the patient refused both evening care and having the bed side rails put up. Using the word refuse to document the patient's wish not to have assistance with evening care was also interpreted to mean that such care was an activity with which all patients had to comply. When this chart was read in its entirety, it was noted that on several evenings the patient expressed the desire to forgo any preparations for sleep. On those occasions the nurses recorded such remarks that indicated that the patient was too tired to prepare for sleep or was observed to be already asleep prior to the usual time such assistance was offered.

Patient Teaching

In reference to the documentation of patient teaching the guidelines were vague. The only specific information was found in the sections on the preparation of the patient for discharge or the operating room. In the former, the nurse was to document on both the nurses' notes and a special teaching sheet all discharge teaching and the response of the patient to that teaching. In the six instances where the patients were discharged some aspect of teaching or response to teaching should have been recorded. On only one chart did the nurse make a comment about instructions. The comment was general in nature and possibly represented a routine summary statement rather than an actual emphasis on individual teaching. The nurse in question had only one discharge documentation episode so no comparison was possible. In terms of recorded information concerning preoperative and postoperative teaching situations the guidelines were much clearer. The guidelines summarized what the information was to be charted on each document that accompanied the patient to the operating room. For instance the patient's understanding was to be documented on the nurses's notes while the vital signs were to be recorded on a specific checklist.

There were no examples or information concerning what other teaching was to be recorded on the special teaching sheet. Without a copy

of the special teaching sheet or other specific information on the use of such a sheet it was impossible to determine exactly what teaching responsibilities were assigned on an ongoing basis to the nurses reviewed in this study. Teaching possibly occurred when a nurse gave a patient urine collection bottles to be used while he was on a pass from the hospital. No information was recorded concerning the collection process and whether the patient understood that he was to discard the first voided specimen.

The guidelines outlined a procedure to be followed when a nurse was required to witness a consent. If the nurse determined that the patient either did not understand the procedure or was indicating an unwillingness to consent to the procedure, the nurse was to contact the physician. This statement in the guidelines clearly placed the responsibility for teaching or explaining the procedure with the physician. Therefore, if the nurse was not required to witness a consent, there may have been no requirement for formal teaching, hence, no need for documentation to occur. For example, a patient had a computer axial tomography test. Since the consent had been witnessed by the physician the nurse may have assumed than an informed consent had been given and there was no need to follow up. In any case, there was no statement demonstrating that a nurse had reviewed the procedure with the patient for comprehension or willingness to have the test.

Lastly, the need to teach a patient arose from a physician's order. The patient was to be taught deep breathing and coughing exercises. Upon reviewing the chart there was no special education sheet or any documentation on the nurses' notes recording the teaching, comprehension or observation that the patient had learned and was executing the exercises. as previously mentioned, the request was most likely considered an expected nursing routine.

Conflicting Conclusions

Conflicting conclusions occurred when the nurse recorded two or more statements within one entry that were at odds with each other. Each occurrence was documented by an individual nurse at the time of an initial assessment. In the first episode the nurse recorded that the patient denied any concerns or problems and immediately followed this statement with an upper back pain complaint. A second example stated that the patient was both alert and confused, while the last example recorded that the patient was very short of breath on exertion but did not have any concerns. No clue was given as to what any of the nurses considered a problem or how they had identified a problem. For instance, in the case where the patient experienced back pain, the nurse may not have considered the pain to be a problem unless an analgesic was given.

Summary Statements

Just as nurses made routine assessments to begin the shift, there were recognizable statements that showed the nurses were concluding their episode. Statements included comments about the equipment currently in use, position of the side rails or other safety considerations, or whether the patient had voiced any last concerns. Placement of information in the summary statement was usually ordered, with the comments about the equipment preceding comments about the patient. This practice differed from the initial assessments where the equipment references were recorded within the particular body system being documented. A statement regarding the patient's respiratory status was not always included in the summary statement.

Admission Documentation

The guidelines listed specific information that was to be recorded on a standard form used by the unit. All the charts reviewed contained the standard admission form. The form comprised an objective section on forced choice or visual cues and a section for narrative information. The eleven items listed on the admission form were not to be duplicated on the nurses' notes. None of the narrative sections on the admission forms were full, thereby, making it unnecessary for the nurse to have completed the initial assessment

information on the nurses's notes.

The narrative section on the admission form was to include a capsule summary of the patient's condition, description of any pre-existing conditions which decreased the patient's health status and activities of daily living that could or could not be achieved (See Table 1). The narrative section on the charts reviewed had assessments similar to an initial assessment. Comments were usually arranged to follow the body systems approach and may or may not have been complete. All nurses made a comment about the patient's skin with warm and dry being recorded on four of the seven files, warm on two and bruising noted on one file. This accuracy was not demonstrated in the recording of the presence or absence of oxygen therapy. Five of the seven patients were admitted with oxygen therapy in place. However, oxygen therapy was recorded on only four admission forms. Oxygen therapy was recorded on the nurses' notes of the fifth file. The flow rate and method of delivery were recorded correctly on the admission forms and incompletely in the nurses' notes.

On one occasion the nurse recorded that the oxygen was reduced following an oxygen saturation test as the concentration of oxygen was too high. There was one example of an individual assessment that could be used to form the basis of the nursing care plan. The nurse commented that the

care focus was to be palliative in nature and that the patient was to be kept comfortable. On the remaining nursing admission forms nurses made individual statements about the patient but no indication was given that the information was relevant or that the information was used for the basis of care. For instance, a nurse recorded that the patient was on a special diet but did not mention whether the patient had any difficulties or concerns with the diet, although the patient frequently ate out in restaurants at irregular hours. The nurse also noted that the patient had sweats and fevers but did not explore further.

Table 1

Requirements completed for forced choice visual cues

ITEM	1	2	3	4	5	6	7
DATE	YES	YES	YES	YES	YES	YES	YES
TIME	NN*	NN*	NN*	NN*	FORM	NN*	NN*
MODE	STR* NN	STR* NN	STR	WALK	STR	STR	?
PERSON ACCOM.	?	?	PORTER	WIFE	REL*	REL* ORDERLY	
ARRIVE 15 MIN	?	?	?	?	?	?	?
HT.	YES	NO	NO	YES	NO	NO	YES
WT.	YES	NO	NO	YES	NO	NO	YES
VS	YES	YES	YES	YES	YES	YES	YES
RX*	NONE	NO	NO	NO	YES	NO	NO
DRUGS	YES	YES	NO	YES	NO	YES	NONE
ALLERGIES	NONE	YES	NONE	YES	?	YES	NONE

Note. NN* Nurses' notes, REL* Relative, STR* Stretcher, RX* Treatment

The first entry of the nurses' notes contained a repeat of some of the information found in the admission history. This included the repetition of the vital signs, height and weight, parts of the body systems assessment, and presenting symptoms. There was nothing in the guidelines to suggest that any information had to be repeated. This finding may have been representative of the small sample size as three of the patients were admitted by the same nurse and whose documentation style was consistent throughout.

The guidelines did not define a time line in which all the admission information was to be obtained. In reviewing the documentation for the twenty four hour period following admission additional information was recorded to round out the admission history. Information such as assistance required to ambulate, or the patient assumed responsibility for insulin administration were examples about activities of daily living recorded in subsequent episodes within the twenty-four hour period.

Integration of Secondary Diagnoses with Initial and Ongoing Assessments

The nurse was to record all pre-existing health problems as part of the admission documentation. The secondary diagnosis may or may not have had a direct impact on the outcome of the patient's current admission. The guidelines did not articulate if the identification of such diagnoses was to be

through direct contact with the patient, a person other than the patient giving information or from other elsewhere in the chart. In order to determine the extent to which secondary diagnoses were recognized and recorded, the admission documentation was compared to that of the physician history sheet. The secondary diagnoses were frequently very evident such as hydrocephalus in the patient who was unconscious or kyphoscoliosis in the patient with paraplegia. In the physician history sheet the physician used the medical terms hydrocephalus, and kyphoscoliosis while the nurse possibly recorded the term "Eric Cormack resident" for the former and no comment about the latter. Kyphoscoliosis had a direct impact on the lung disease of the patient with paraplegia, as the distortion of the thoracic cage contributed to the chronic lung disease. This would then have an additive effect in chronic lung disease.

In the second example, nurses used the visual cues on the admission form to record information about diet, bowel habits, sleep patterns. However, no indication was given that such information was used to put together a holistic picture of the patient or that the information used to provide the basis of a nursing care plan. In the third type of example, the nurse recorded the major secondary diagnosis but did not record any untoward outcomes of the diagnosis. As recorded on the physician history sheet, the patient had been

a "brittle" diabetic for a considerable number of years and had developed a nephropathy and retinopathy. The nurses were diligent in recording that the patient was having difficulty in regulating his blood sugar during hospitalization (i.e., hypoglycemia early on in the admission and hyperglycemia when on pass). However, there was no documentation that any nurse determined if the patient could read the gradations on the hospital supplied syringe. In the last example, an elderly female patient with frequent admissions to hospital did not have any secondary diagnoses recorded on her admission form. The diagnoses of emphysema, asthma, congestive heart failure, possible myocardial infarction, recurrent urinary tract infections, osteopenia, bilateral cataracts and total hip replacement were recorded on the physician history sheet. Nurses documented that from time to time the patient's feet were swollen but none related this finding to a cardiac diagnosis. Although the nurses recorded the frequency of bed pan use no documentation was evident to indicate that the nurses were cognizant of the frequent urinary tract infections. There was an indication on the nursing admission form that the patient had been admitted for pulmonary problems in the past. Perhaps this lack of documentation regarding secondary diagnoses represented typical documentation of a patient who was well known to the unit.

Transfer Documentation

The unconscious patient was transferred to a medical ward 56 hours after admission. The nurse received the patient for care at 2300 hours and noted that the transfer took place at 0020 hours. The nurse made a cursory recording of the patient's condition including such parameters as position in bed, state of arousal and the rate of flow of the enteral feeding. No other information was recorded in the nurses' notes. Although the guidelines required more information to be charted such as notification of family, it was unlikely that the nurse had the time to carry out all the necessary tasks associated with this transfer without assistance. To transfer a stable patient at this hour of the night usually signified that an unstable pulmonary patient, currently in the emergency department, required an urgent admission. It was also unlikely that the nurse would awaken a sleeping family member to advise of the transfer.

Discharge Documentation

The remaining six patients were discharged to home. The guidelines made specific reference to the discharge activities that were to be recorded. None of the six charts contained all the required elements of discharge charting. On two occasions there was no information about the actual discharge. In one example, the nurse reeorded the discrepancy between a

patient and her housekeeper regarding fitness for discharge. The nurse did not record any nursing intervention but simply recorded that the physician would come and discuss the pending discharge with both parties. All nursing documentation ceased after this statement. There was space remaining in the nurses' notes, therefore one possible interpretation was that no actual discharge events were documented. In the second example, there was no recording on the nurses' notes after 2000 hours on August 17, 1992. As in the former example, the actual discharge event was missing. However, in this case the physician's discharge summary note indicated that the patient was discharged on August 18, 1992. The nurses' note on this occasion was full and did not contain a signature In this case, the possible interpretation the final page of nurses' notes was missing.

In the remaining four charts some information was given about the activities that occurred around the time of discharge. The guidelines listed five areas that the nurse was to comment upon prior to the patient's discharge. Statements such as no voiced concerns, or in no distress and no SOB, loosely corresponded to of statements about physical and emotional state. Of note was the entry where the nurse recorded the son's response to the notification of pending discharge but did not record any comment or observation of the emotional state of the patient. The nurse later recorded

that the patient left in fair condition. A second category to be recorded was that of information regarding follow up plans, appointments and prescriptions to be taken at home. Documentation occurred on three occasions. In the least detailed comment, the nurse recorded that a discharge envelope was given to the patient but there was no indication as to what was contained in the envelope and to whom the envelope belonged. For instance, did the envelope contain information for the patient such as prescriptions or dates for follow up visits or a summary for the patient's personal physician regarding the medical care given during the current admission and instructions for follow up care. In the other examples nurses recorded that prescriptions and appointments were given to the patient. There were no recorded patient responses to this activity. According to the guidelines, discharge teaching was to be recorded on both the nurses' notes and on the special teaching form. None of the seven charts reviewed contained the special teaching form. On only one occasion did a nurse allude to pre-discharge teaching by having recorded that discharge instructions were given. The nurse did not elaborate on the statement. The nurse was not involved in any other discharge examples. Therefore, one cannot determine if this statement reflected a routine summary statement or represented an individual statement of the nurse's action. Similar to the admission procedure, the nurse was required

document the how, when, where and with whom the patient left the hospital. Although incomplete, on four occasions it was evident that the nurses attempted to comply with the documentation requirement. The entries ranged from including one element such as discharged walking, to several elements such as the mode of transportation and the person accompanying the patient. In the case of one patient, the nurse did not include in the statement whether or not the wife accompanied her husband at discharge. Over the course of his hospitalization, this patient had frequent passes from the hospital. On those occasions, the nurses charted that the wife accompanied her husband when he left the unit. Lastly, the nurse was supposed to comment about the status of the patient's valuables. No information was recorded about any patient valuables by any nurse at the time of discharge.

CHAPTER V: DISCUSSION AND CONCLUSIONS

Discussion

Mish (1989) defined a guideline as a plan or framework through which a course of action is carried out. The researcher considers the charting guidelines as a set of instructions governing the conduct of the nurse in regards to charting (i.e., must document that the patient is observed every two hours, reflect ongoing patient assessment, etc.). Further, the outcome of such conduct should assist the nurse in documenting a clear, concise and accurate patient care record. When the required charting elements are reviewed in their entirety, the researcher could easily perceive that the nurses do not comply with the guidelines. However, when the researcher surveys the larger picture deterrents to full charting, such as access to the charts, the emphasis placed on narrative documentation, or the lack of visual cues to assist the nurse to include all pertinent information, were identified.

Nurses care for patients and their families in discrete segments of time over the course of their shift. All patients assigned to the nurse may not be in the same room, so the distance of the physical separation between the patients is another factor increasing the fragmentation of care. For instance, the nurse receives reports about a set number of patients and determines the

initial nursing actions based on the information. The nurse manoeuvres from one patient to the next, performs assessments and revises the original care plan as required. In reviewing the chart it is observable that the nurses perform initial assessments and observes some form of patient activity. The nurses are then required to make professional judgements about the frequency of additional assessments, and the type and content of documentation to be captured in the nurses' notes. For those nurses who use the timed entry type of documentation, it appears that they routinely withdrew from the bed side once discrete units of nursing care take place.

The type of nursing documentation found in the charts under review may be the consequence of the way in which these nurses were taught to record patient care. If nurses focus solely on the problems of the patient, the outcomes would naturally be to document the deviations from normal. The resultant illness model of viewing the patient excludes the nurse from moving forward to examining the outcomes of nursing interventions. According to Schmidt (1981), for nurses, the focus of outcome criteria documentation should be on normal, healthy actions and not on those actions which are abnormal. In the case of the patient with bronchiectasis, the nurses perhaps should have focused on how to assist the patient in self care in order to prevent the recurrence of pneumonia and further hospitalization. Rather, the

documentation is limited almost solely to the observations of decreased air entry to his lower lobes and difficulty in maintaining a consistent blood sugar. These observations directly relate to deviations from normal. The researcher has no idea how the patient with several serious health problems is able to comprehend and adapt to the addition of another serious health problem.

In a second example, nurses frequently document that patients are short of breath on exertion, a deviation, from normal. None of the entries focus on any intervention, either clinical or educational, that allow the patient to carry out the normal activities of daily living without experiencing extreme shortness of breath. A possible contributing factor or explanation for the content of the documentation may be seen in the frequent use of colloquial language rather than the use of standard medical terminology. The same language was also present in the documentation on the physician's notes. Since the nurses use colloquial language to record their care, it is most likely that they also use the same language to communicate verbally to their peers. The ability to converse in meaningful language may possibly be a positive behaviour, and, therefore its use is reinforced (Renfroe, O'Sullivan, McGee, 1990). The fact that colloquial language is also in extensive use by the physicians helps to create and reinforce an easy communication link between professionals. Incorporation of colloquial language occurs early in a nurse's

career. Since colloquial language is not recorded in nursing textbooks until it assumes the status of a norm, students possibly acquire the language through either verbal interactions or through reading nurses' notes.

Proficiency in charting is considered by Feutz-Harter (1989) to be a developmental process. In this study there were several examples of documentation by student nurses. If the student nurses' documentation is reviewed in conjunction with that of the registered nurses the researcher cannot elicit any major differences. Two possible inferences can be made from this finding. The documentation in the patient charts is sufficiently easy to learn or, secondly, the student nurses are taught well by the nurses on the unit in the study.

In 1964 Walker and Selmanoff, combining observations of nursing care given with the resultant documentation, demonstrated that the most significant finding was the omission of observations rather than inaccuracies in their content. The block type entries in the charts tended to have the least number of comments about the direct observations of the patient or the outcomes of care. At first glance it may appear practical for the nurse to jot down a word or cue on a worksheet throughout the episode and then attempt to reconstruct the events at the end of the episode. However, one can never be certain that enough cues have been recorded in a discernable manner to

permit the nurse to accurately record all the events of the episode. Since this study focuses solely on the content of nurses' notes, it is impossible to determine how the nurses store their data prior to documentation on the nurses' notes.

Charting without consideration for what occurs during the previous episode also increases the likelihood of omissions. It is seldom evident that any nurse considers the events of the previous episode or attempts to build on the information found in the documentation. In reading chart five in its entirety, it is apparent that the patient was becoming weaker and more withdrawn daily. Activities to encourage ambulation or an increase in socialization with those around her are seldom evident in the documentation. The number of first time care givers also increases as the patient's length of stay increases. When charts are thick, it is unrealistic to think that a nurse has the time to review the nurses' notes in their entirety. The subtle changes that may be identified by a full reading are missed. The researcher can also identify the failure to incorporate secondary diagnoses into the care of the patient as an example of an omission rather than as an inaccuracy of documentation. Although the patients in this study are admitted to an area that specializes in the care of persons with lung conditions, nursing practice is holistic in nature and one in which the nurse is obliged to meet the needs

of the patient in a variety of ways (AARN, 1992). It is inconceivable to think that the secondary diagnosis of hydrocephalus dos not have any bearing on the way in which the nurses structure their care of this patient.

The last issue to be considered in the omission of documentation is that of awareness by each nurse of the expected outcomes of each particular pulmonary diagnosis. If the outcomes of nursing interventions are not articulated, through standard care plans or care maps, then the nurse will not necessarily know the observations or charting expectations. The use of standard care plans is not evident in this documentation review. The Kardex containing the nursing care plans is not part of the chart. Therefore, it is impossible to review the chart in conjunction with the care plan. However, if the nurses report their care to the nurses of the oncoming shift in terms of the individual nursing care plan, the information in the chart does not reflect this.

Visual cues aid in the collection of information but does not necessarily assist the nurses in the synthesis and use of the information in an individual way. For instance, it is recorded on the admission form that the patient with paraplegia requires a bowel routine. No nurse acknowledges this information during the recording of any assessment regarding the gastrointestinal tract. The medications are not ordered until three days later,

when the patient becomes impacted. The patients' bowels remain unregulated for the remainder of his hospitalization. Nurses also use visual cues to document their review of body systems. Again, this appears to be more of a routine assessment rather than as the reporting of how the nurse comes to plan individual care for the patient.

Fragmentation in care delivery, omissions in documentation and the failure to synthesize information from use of visual cues may increase the likelihood of poor nursing care. Although nurses do not have total control over their delivery of nursing care, there are areas that are amenable to change to enhance their nursing care. If the researcher examines the issue of fragmentation of care there are several ways in which changes to the way care is delivered that could result in better patient care. Firstly, if the nurse records information on a worksheet later to be transferred to the nurses's notes it would seem reasonable to eliminate this step and place the nurses' notes at the bedside. The information is gathered and recorded in one step. Time is not wasted by leaving the bedside to retrieve the chart at the nursing station. Having the patient in view while the documentation process is carried out may assist the nurse in recording all necessary details. The visible patient may be considered the best possible visual cue. Although such an action may result in a more complete recording of observations, having the patient in

view will not necessarily lead to increased documentation of the outcomes of nursing interventions. In order to document the outcome of care the nurse needs to know the plan of care. In light of the current nursing cut backs it is unreasonable to expect a nurse to copy information from four to six nursing care plans in order to become familiar with the care plan and expected outcomes. Therefore, if the nursing care plan is to form the basis of the care, it should also be close to the patient. If the care plan and the documentation are to be coordinated the nurses' notes should be structured so that the nurse focuses on the outcomes identified on the care plan. A documentation process with a focus on the care plan outcomes could become the binding factor that would link all episodes together. Lastly, if the nursing care plan is a mutually agreed upon document between patient and nurse then perhaps the patient should also be included in the actual documentation process. Where feasible, a short summary note could be written by the patient involving information that the patient feels is relevant to progress.

Omissions in documentation and failure to synthesize information obtained through visual cues can be addressed through the designing of a comprehensive flow sheet type nurses's notes. The flow sheet should be designed so that visual cues are given for four areas: 1) assessment, 2) plan, 3) implementation, and 4) evaluation. The Focus method of charting (Lampe,

1985) is one example of coordinating the nursing care plan and nurses' notes in a structured narrative format. The nursing care plan not only identifies the short term goals but also the frequency each nursing action is to be documented (Gryfinski & Lampe, 1990). The second method of organizing data is through the use of a highly structured patient assessment flow sheet which covers at least one twenty four hour period. The nurses are required to note only those areas of concern to the patient, education sessions delivered or outcomes from nursing interventions. Freelance narration and duplication of information is kept to a minimum. Lastly, if the trend toward computerization of nursing documentation continues, employers and nursing educators will be faced with the same problems of data capture as they currently experience with a paper file. The data input equipment must be easily accessible, close to the point of care, easy to use and must have the ability to have both objective and freelance options. Data retrieval also needs to be easily accessible with information displayed not only in discrete data units but also as data trends.

Conclusions

Nurses document information about patient care as a matter of fulfilment of their legal and professional responsibilities. Although documentation is believed to be an important means of communication

amongst nurses, in this review of the content of nurses' notes of patients with pulmonary conditions, it is apparent that the nurses' notes are not the primary means of communication. Formal documentation forms have few visual cues to assist nurses in capturing and synthesizing pertinent data and few outcomes of nursing interventions are recorded. As the radical redesign of the health care system in Alberta takes place, nurses will be obliged to create a nursing documentation process that, although brief, becomes a cost effective tool for communication. As hospital stays shorten there will be increased emphasis on creating a seamless communication link between hospital based and community based nurses. It may be reasonable to include community based nurses in the nursing documentation redesign process so that hospital based nurses may not only begin to understand the information needs of community based nurses but also the needs of clients who are discharged into the community for further care.

Nurses are continuously challenged to make increasingly complex decisions affecting patient care. The future direction of nursing documentation will need to reflect the nursing judgements, the interventions and the evaluation of care that surround these complex decisions. Nurses will be required to demonstrate that their interventions had a direct impact on patient outcomes. However, changes in nursing documentation cannot be

made in isolation. Methods of recording the planning, implementation, evaluation and outcomes of nursing care must be integral to the act of nursing care itself. Future research should focus on identifying ways in which the barriers to effective documentation can be overcome. Increasing visual cues on documentation forms, moving the point of data capture closer to the patient, or creating computer programs that permit the data trends to be identified are examples of possible research projects that could be undertaken to enhance the ease with which pertinent information can be documented. Lastly, further research is needed to examine ways in which the value of nursing documentation can be increased so that recording the assessments, planning, implementation, and evaluation of nursing care are accurate, timely and meaningful. One such focus can be directed toward exploring nurses perceptions of what aspects of documentation would need to change to have physicians come to value nursing documentation.

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Appendix A

DOCUMENTATION INFORMATION COLLECTION SHEET

CHART CODE NUMBER: _____ DATE OF NURSES NOTE: _____

SHIFT: _____ AUDIT DATE: _____

CLASSIFICATION: RN GN SRN LPN STATUS: FTR PTR REL

DIAGNOSIS ON ADMISSION: _____ (primary)
_____ (secondary)
_____
_____
_____

DOCTOR: _____ (primary)

CONSULTANT(S): _____ REASON _____
_____ REASON _____
_____ REASON _____

DEMOGRAPHIC INFORMATION

ELEMENT	DETAIL
DATE OF BIRTH	
GENDER	M F
MARITAL STATUS	M S D O
OCCUPATION	
EDUCATION LEVEL	
RESPIRATORY HOME CARE PROGRAM RECIPIENT	Y N
PREVIOUS ADMISSIONS FOR THIS DIAGNOSIS	Y N
PREVIOUS ADMISSIONS (OTHER)	Y N

GENERAL CHARTING GUIDELINES

GUIDELINE	FOLLOWED
NURSES NOTES STAMPED WITH PT. I.D.	Y N NA
ALL ENTRIES SIGNED WITH FULL SIGNATURE AND CATEGORY	Y N NA
LEGIBLE WRITING OR PRINTING	Y N NA
PROFESSIONAL TERMINOLOGY USED	Y N NA
ABBREVIATIONS ACCORDING TO GUIDELINES	Y N NA
ERRORS HANDLED AS PER GUIDELINES	Y N NA
NURSES NOTES IN BLACK INK	Y N NA
DOCUMENTATION IN CHRONOLOGICAL ORDER WHERE POSSIBLE	Y N NA
NO SPACE LEFT ON NURSES NOTES	Y N NA
IF SPACE PRESENT LINE DRAWN THROUGH SPACE	Y N NA
DOCUMENTATION INDICATES PT. OBSERVATIONS/ASSESSMENTS HAVE OCCURRED AT LEAST EVERY TWO HOURS	
IF DOCUMENTATION EXTENDS TO NEW PAGE: WRITER TO SIGN END OF FIRST PAGE; COMPLETED CHARTING MUST BE SIGNED AT END OF ENTRY	Y N NA
2400 HOURS: LINE DRAWN ACROSS PAGE AND NEW DATE ENTERED IN COMMENTS AND OBSERVATION COLUMN	Y N NA
CURRENT DATE MUST BE ON THE TOP OF EACH PAGE	Y N NA
IF CHARTING DOES NOT EXTEND TO RIGHT-HAND MARGIN: HORIZONTAL LINE IS DRAWN FOLLOWING THE CHARTING ENTRY AND PROCEEDING THE SIGNATURE AND CATEGORY OF THE WRITER	Y N NA
ENTRIES MADE EVERY 24 HOURS IF PT. ON PASS: PATIENT REMAINS ON PASS	Y N NA
INFORMATION IS CONCISE	Y N NA
INFORMATION IS WRITTEN IN CHRONOLOGICAL ORDER	Y N NA

ADMISSION DOCUMENTATION

GUIDELINE	FOLLOWED	P
DATE TIME MODE OF ADMISSION TO UNIT	Y N Y N Y N	
PERSON(S) ACCOMPANYING PATIENT, RELATIONSHIP	Y N NA	
DOCUMENTATION TO SUPPORT THAT A NURSE RECEIVED PT. WITHIN 15 MIN. UPON ARRIVAL TO THE UNIT.	Y N	
THE FOLLOWING ARE RECORDED: HT WEIGHT VITAL SIGNS ALLERGIES	 Y N Y N Y N Y N	
GENERAL PHYSICAL DESCRIPTION, INCLUDING SKIN CONDITION EMOTIONAL STATUS DESCRIBED	Y N Y N	P P
LIST OF PRE-EXISTING HEALTH PROBLEMS, INCLUDING TREATMENTS, MEDICATIONS	Y N NA	
LIST OF ADL WHICH PT CAN/CANNOT DO FOR SELF	Y N	P
ADMISSION DONE BY STUDENT NURSE THE RN HAS CO-SIGNED THE NOTE	Y N NA	

Note. P Photocopy

ONGOING DOCUMENTATION GUIDELINES

GUIDELINE	FOLLOWED	P
CHARTING DONE BY PERSON WITH FIRST HAND KNOWLEDGE	Y N NA	P
DOCUMENTATION SHOWS PATIENT OBSERVED/ASSESSED EVERY TWO HOURS	Y N NA	P
PATIENTS REQUIRING A DEFINED LEVEL OF NURSING OBSERVATION: BEGINNING OF SHIFT THIS MUST BE RECORDED	Y N NA	P
ENTRIES ARE IN CHRONOLOGICAL ORDER AND CLOSE TO THE TIME AS POSSIBLE	Y N NA	P
LATE ENTRIES PREFACED BY: LATE ENTRY IN TREATMENT OR PROCEDURE COLUMN	Y N NA	P
USE OF BLOCK ENTRIES: TIME OF BLOCK RECORDED IN TIME COLUMN (I.E., 0700-1100), TIME OF TREATMENT/ OBSERVATION, SIGNATURE, CATEGORY OF WRITER	Y N NA	P
USE OF CUMULATIVE ENTRIES: IN WHICH NURSE CHARTS AT A POINT WELL INTO THE SHIFT BUT IDENTIFIES TIME OF OCCURRENCE OF EACH TREATMENT/OBSERVATION IN THE TIME COLUMN, SIGNATURE AND CATEGORY AT THE END OF THE LAST ENTRY	Y N NA	P
USE OF ON TIME ENTRIES: EACH INDIVIDUAL TREATMENT/OBSERVATION IS RECORDED AT THE TIME RIGHT AFTER IT WAS DONE, TIME IN IDENTIFIED IN THE TIME COLUMN, SIGNATURE AND CATEGORY OF WRITER	Y N NA	P
INFORMATION TO BE CHARTED IN OUTDENTED FASHION:		
CHANGE IN PATIENT STATUS	Y N NA	P
NOTIFICATION OF DOCTOR OF CHANGE IN PATIENT STATUS	Y N NA	P
SPECIMEN COLLECTION	Y N NA	P
DIET CHANGES	Y N NA	P
SAFETY MEASURES ASSESS/APPLY	Y N NA	P
DOCTOR'S VISITS (BY NAME) - IF OBSERVED	Y N NA	P
DIAGNOSTIC PROCEDURES/TREATMENTS PERFORMED	Y N NA	P
PRN MEDICATION GIVEN	Y N NA	P
TRANSPORTS OFF UNIT:	Y N NA	P
PURPOSE	Y N NA	P
DESTINATION	Y N NA	P
TIME	Y N NA	P
MODE	Y N NA	P
RETURN	Y N NA	P
INITIATION OF IV THERAPY	Y N NA	P
DISCONTINUATION OF IV THERAPY	Y N NA	P
OXYGEN THERAPY	Y N NA	P
INITIATION	Y N NA	P
CHANGE	Y N NA	P
DISCONTINUATION	Y N NA	P
EVIDENCE OF EVALUATION OF ONGOING MEASURES TO ASSIST PATIENT TO MEET SELF NEEDS	Y N NA	P
EVIDENCE OF GENERAL OBSERVATIONS RELATED TO PERSONAL HABITS LEVEL OF HEALTH	Y N NA	P
EVIDENCE OF REASONS FOR OMISSION OF ANY TREATMENTS	Y N NA	P

PATIENT TRANSFER GUIDELINE (TRANSFER OFF UNIT)

PATIENT TRANSFERRED: YES ___ NO ___

GUIDELINE	FOLLOWED	P
NOTE OF ALL MEDICAL AND NURSING INTERVENTIONS/OBSERVATIONS AT TIME OF TRANSFER	Y N	P
PATIENT'S RESPONSE TO TRANSFER	Y N	P
IV'S INCLUDING SOLUTION, RATE, AMOUNT OF FLUID TBA; DRAINAGE AMOUNT, TYPE	Y N NA	
NOTIFICATION OF FAMILY OR SIGNIFICANT OTHER	Y N NA	P
EXACT TIME MODE DESTINATION OF TRANSFER	Y N Y N Y N	P P P
PHYSICIAN TO WHOM PT IS BEING TRANSFERRED	Y N	P

MEDICATION INFORMATION DOCUMENTED ON NURSES NOTES

GUIDELINE	FOLLOWED	P
DOCUMENTATION OF REASON FOR REFUSAL OF MEDICATION	Y N NA	P
DOCUMENTATION OF REASON FOR WITHHOLDING MEDICATION	Y N NA	P
DOCUMENTATION THAT MEDICATIONS WITHHELD DUE TO MEDICATION SENT TO OR	Y N NA	P
DOCUMENTATION OF RESPONSE TO PRN MEDICATION	Y N NA	P
DOCUMENTATION OF RESPONSE TO SCHEDULED MEDICATION	Y N NA	P

DISCHARGE DOCUMENTATION

GUIDELINE	FOLLOWED	P
DOCUMENTATION OF PHYSICAL STATUS DOCUMENTATION OF EMOTIONAL STATUS	Y N NA Y N NA	P P
PATIENT TEACHING RESPONSE TO TEACHING	Y N NA Y N NA	P P
FOLLOW-UP APPOINTMENTS AND/OR PRESCRIPTIONS	Y N NA Y N NA	
HOW WHERE WHEN WITH WHOM PATIENT LEFT HOSPITAL	Y N NA Y N NA Y N NA Y N NA	
VALUABLES RETURNED TO PATIENT WHICH HAD BEEN SECURED BY STAFF	Y N NA	

PRE-OPERATIVE AND POST-OPERATIVE DOCUMENTATION

SURGICAL PROCEDURE PERFORMED: YES ___ NO ___

GUIDELINE	FOLLOWED	P
SPECIFIC PRE-OPERATIVE TEACHING, PATIENT'S COMPREHENSION AND RESPONSE TO PRE-OPERATIVE TEACHING PERFORMED	Y N NA	P
PRESENCE OF COMPLETED PATIENT CONSENT FORM	Y N NA	
SPECIFIC PRE-OPERATIVE TREATMENTS/PROCEDURES PERFORMED	Y N NA	P
PREPARATION OF PATIENT FOR THE OR INCLUDING ASSESSMENT OF PATIENT'S PHYSICAL AND EMOTIONAL STATUS, AND RESPONSE TO POST-OPERATIVE SEDATION	Y N NA	P
SECUREMENT OF VALUABLES	Y N NA	
TIME PATIENT TRANSPORTED TO OR	Y N NA	
TIME, MODE OF RETURN TO NURSING UNIT	Y N NA	
AIRWAY PATENCY; LEVEL OF CONSCIOUSNESS; ORIENTATION TO TIME, PERSON, PLACE; GENERAL APPEARANCE INCLUDING COLOUR, CIRCULATION, AND SKIN CONDITION	Y N NA	P
PRESENCE/ABSENCE OF PAIN	Y N NA	P
PRESENCE OF CATHETERS, DRAINS; INDICATION OF PATENCY; DESCRIPTION AND AMOUNT OF DRAINAGE	Y N NA	P
STATUS OF DRESSINGS AND OR/WOUNDS INDICATING TYPE, LOCATION	Y N NA	P
IV THERAPY ACCESS SITE(S), RATE, SOLUTION	Y N NA	
SAFETY MEASURES IN PLACE	Y N NA	P
RETURN OF VALUABLES, PROTHESES	Y N NA	
TIME OF INITIAL POST-OPERATIVE VOIDING	Y N NA	P
POST-OPERATIVE SPONGE BATH, IF APPLICABLE	Y N NA	P

DOCUMENTATION OF UNUSUAL INCIDENTS

UNUSUAL INCIDENT OCCURRED: YES ___ NO ___

GUIDELINE	FOLLOWED	P
COMPLETED AS SOON AS INCIDENT HAS BEEN DISCOVERED OR HAS OCCURRED	Y N NA	P
DOCUMENTATION DONE BY PATIENT'S ASSIGNED NURSE	Y N NA	
DOCUMENTATION OF STATED INCIDENT IF PERSON WHO DISCOVERED INCIDENT IS NOT PERMITTED USE OF PATIENT'S CHART	Y N NA	P
IF PATIENT'S NURSE IS NOT AVAILABLE ANOTHER RN MUST CARRY OUT THE CHARTING	Y N NA	P
INFORMATION IS FACTUAL (WHAT HAS OCCURRED)	Y N NA	P
DOCUMENTATION OF DATE TIME	Y N NA Y N NA	
NO PERSONAL OPINION DOCUMENTED	Y N NA	P
NO STATEMENT THAT AN UNUSUAL INCIDENT FORM HAS BEEN COMPLETED	Y N NA	

LONG TERM CARE DOCUMENTATION

LONG TERM CARE DOCUMENTATION USED: YES ___ NO ___

GUIDELINE	FOLLOWED	P
DOCUMENTATION OF UNUSUAL TREATMENTS, PROCEDURES, SIGNIFICANT CHANGES	Y N NA	P
DATE COLUMN FORMAT (22JUN92)	Y N NA	
TIME RECORDED FOR EACH TREATMENT/OBSERVATION	Y N NA	
DOCUMENTATION OF ONGOING PATIENT ASSESSMENT	Y N NA	P
DOCUMENTATION OF EVALUATION OF MEASURES TO ASSIST PATIENT TO MEET HIS NEEDS	Y N NA	P
CURRENT SUMMARY OF PATIENT'S PHYSICAL, PSYCHOLOGICAL, SPIRITUAL STATUS (MONTHLY REVIEW)	Y N NA	P